



#### Contacts:

STUART CLARK <u>stuart.clark@ipsos.com</u>

Ph: +614 5101 1398

NONIE FINLAYSON nonie.finlayson@ipsos.com

Ph: +614 22 791 491

Ipsos

Level 3, 201 Leichhardt Street, Spring Hill QLD 4000

Level 2, 51 Berry Street, North Sydney NSW 2060

Level 2, Building 1, 658 Church Street Richmond VIC 3121

338 Barker Road, Subiaco, WA 6008







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# **Executive Summary**

## **Background and objectives**

The Queensland Department of Environment and Science (DES) commissioned Ipsos to conduct research in Queensland. This report presents a summary of the findings for this littering and illegal dumping research, undertaken in 2020.

The overall objective of this research was to understand the littering and illegal dumping awareness, attitudes and behaviours among the Queensland population. The study establishes baseline results to help assess performance and effectiveness of relevant campaigns and interventions over time as well as to inform and guide programs and messaging, which encourage changes in littering and illegal dumping behaviour.

The establishment of the baseline research coincides with the release of the Keeping Queensland Clean: the Litter and Illegal Dumping Plan and future iterations will assist with evaluating the implementation of the plan.

### Method

An online survey of n=2000 Queensland residents was conducted during October and November 2020. To ensure the sample was representative of the Queensland population, demographic quotas were applied on age, gender and location during conduct of the online fieldwork. The data was subsequently weighted to reflect the distribution of gender, age, location (Brisbane, South East Queensland (SEQ) and Rest of Queensland (ROQ)) in Queensland based on the 2016 Australian Bureau of Statistics (ABS) census data.

The data was analysed using SPSS and Q data analysis software (industry standard software packages used for statistical analyses in social research). Analysis was conducted on demographics and behavioural groups agreed by DES.

## Findings and discussion

For the purposes of this study, the definition of littering and illegal dumping (as used by Queensland Department of Environment and Science) is the unlawful deposit of any type of waste material. These actions are defined as illegal dumping when the volume deposited is 200 litres or more (i.e. about the volume of a standard household wheelie bin) and littering when the volume is less than 200 litres.

Detailed background and methods for the survey are found in Section 1 – Background, method, and analysis. The survey questions posed to panel participants in an online survey can be found in the Section 5.4 (<u>Appendix</u> – Questionnaire).

## Illegal dumping

#### **Behaviours**

Overall, most Queensland residents only dispose of large waste volumes (i.e. greater than 200 litres/ about the size of a wheelie bin) vial legal means (86%). The most commonly disposed of items in large volumes are household recyclables (51%), green waste (50%) and domestic waste (42%), and the most common disposal location for large waste volumes is the tip/landfill.

Overall, 14% of Queenslanders report dumping waste illegally. As a proportion of the Queensland population:

• 9% dump only at kerbside (outside of council collection times);

• and 5% are defined as deliberate dumpers, disposing of large volumes of waste by dumping in public places, on someone else's land or the side of the road.

#### Reporting

When it comes to reporting others for illegal dumping, 10% of Queensland residents have reported someone in the past, with a further 19% having considered doing so.

Likelihood of reporting someone in the future for illegally dumping depends on the context, with 74% of people saying they would be likely to report someone leaving tyres, chemicals and paint tins in a park or bushland. This compares to only 25% saying they are likely to report household goods left beside a charity bin.

Knowledge of which organisations illegal dumping can be reported to is mixed. Most Queenslanders say they would report to local council (71%) followed by QLD Police Service (32%), and only 18% say they would report to DES.

The reasons for not reporting illegal dumping include:

- being unable to take down the required details due to the physical context of the dumping (44%);
- lack of knowledge that reporting is possible or about how to report (29%);
- lack of motivation due to the belief that reporting would be a waste of time (29%); and
- social aspects around being worried that the offender would find out (23%).

#### **Motivations**

Illegal dumping is not considered a serious problem by most Queenslanders (28% 'fairly' or 'very' serious). Most Queenslanders see local councils as the responsible bodies for dealing with illegal dumping (77%), followed by State Government (46%). They are far less likely to say they themselves are responsible (22%), although this response was the third-most common in relation to responsibility for dumping.

The most common motivations for not illegally dumping waste are *social* (not wanting others to have to pick it up, 80% agree), and *aesthetic* (belief that it looks ugly, 79%). Concern about being caught and/or fined is less influential (56% and 57%). Even fewer (13%) feel that high disposal costs are a motivator for them to dump, although 35% agree that costs of disposal are too high.

Most Queenslanders understand that waste has as negative impact on the environment (78% 'quite' or 'very' big impact) and believe that they can make a positive difference to the environment (80%).

#### **Fines**

Queenslanders believe that it is unlikely that they will be caught and fined for illegal dumping in most contexts. The context where being caught is considered most likely is leaving large volumes of waste on the side of the road (42% indicated at least a 5 in 10 chance of getting caught and fined).

There is a low understanding of the scale of fines for various illegal dumping acts, with most people overestimating fines for large scale illegal dumping and underestimating fines for small scale illegal dumping. When told the minimum fines for illegal dumping acts, most people (61%) considered large scale dumping fines are too low.

### Ability

Queenslanders' knowledge in relation to enforcement around illegal dumping is mixed. Just over half (54%) know that the state environmental department and local councils can issue fines for dumping, and only one in five (22%) know they are able to report dumping acts without a record of vehicle details.

Knowledge about the legal disposal of large volumes of waste in a range of circumstances is also mixed. Three quarters of Queenslanders (78%) know that leaving that green waste in a parks and bushland is illegal and (68%) know that leaving furniture on the side of the road is illegal. Slightly more than half (54%) know that leaving household goods next to a charity bin is illegal, with 21% saying they're unsure whether it is illegal or not.

## Physical context

Physical ability to transport waste may be a barrier to correct legal waste disposal for some, with only a third (32%) of Queensland residents indicating they have access to a trailer to transport waste. Most people do have access to a vehicle (92%). Interestingly, over half (54%) have used self-haul in the past to dispose of waste, indicating that borrowing or hiring a trailer is relatively common, and that this may be a motivation or cost factor.

#### Social

Illegal dumping is considered unacceptable by the vast majority of Queenslanders. Nine in 10 (92%) say leaving domestic waste in a park or bushland is unacceptable, 81% say that leaving green waste in a park is unacceptable and 78% say leaving household goods on the side of the road is unacceptable. However, only 60% of participant Queenslanders feel that leaving items beside a charity bin is unacceptable.

The most common social influence on disposal of bulky items is local councils (77% say they are at least a little influenced), followed by family (67%). Far fewer indicate that their choice of disposal methods is influenced by social media (39%) or work colleagues (38%).

### Littering

### **Behaviours**

Under half (47%) of residents are *non-litterers*, not disposing of *any* small waste items illegally. Another 10% only litter food scraps. A quarter of Queenslanders (26%) litter occasionally, with 17% littering frequently.

Over half (58%) have picked up litter in at least the past month, and 17% say they never do.

#### Reporting

One in eight Queensland residents (12%) have reported someone for littering in the past. A further 22% have considered it.

Likelihood of reporting someone in the future for littering is lower than the likelihood of reporting illegal dumping, and again context dependent. Three in five Queenslanders (59%) say they would report someone emptying car waste onto the roadside or flicking a cigarette into dry grass, but only one in eight (12%) would report throwing an apple into a park or bushland.

Knowledge of who to report littering acts to is moderate, with 13% of Queenslanders being unsure about which bodies they should report littering behaviour to. Two thirds (66%) would report to local councils, with 28% reporting to QLD Police Service, and only 13% indicating they would report to DES.

The reasons for not reporting littering include:

- being unable to take down the required details due to the physical context (42%),
- a lack of motivation due to believing reporting would be a waste of time (36%),
- lack of knowledge about being able to report (29%), and
- social aspects around being worried that the offender would find out (22%).

#### **Motivations**

Littering is not considered a serious problem by most Queenslanders (29% 'fairly' or 'very' serious). While more Queenslanders say they are responsible for managing littering (37%) compared to illegal dumping (22%), most see local councils as being responsible for dealing with littering (75%), followed by the State Government (35%).

The most common motivation for avoiding littering was *aesthetic* (thinking it looks ugly, 83%), followed by *social* (not wanting others to have to pick it up, 80%). Concern about being caught and/or fined is less commonly

influential (53%). A third of Queenslanders (31%) would consider leaving food waste in a park or bushland because it is biodegradable.

Most Queenslanders understand that waste has as negative impact on the environment (78% 'quite' or 'very' big impact) and believe that they can make a positive difference to the environment (80%).

#### **Fines**

Queenslanders believe that they are less likely to be caught and fined for littering in most contexts than for illegal dumping. The scenario where being caught it considered most likely is dropping a small bag of rubbish out of a vehicle (34% indicate at least a 5 in 10 chance of being caught and fined). The perceived chance of being caught is much lower for leaving rubbish beside a full bin (19% indicate at least a 5 in 10 chance of being caught and fined).

Most people overestimate fines for dangerous littering but are closer to the mark for general littering. When told how much the fines are for various littering acts, Queenslanders are accepting of general littering minimum fines (65% say appropriate) but have mixed feelings about the minimum dangerous littering fines (44% say appropriate, 48% say too low).

### **Ability**

Knowledge in relation to the legality of littering is mixed and depends on context and the type of items littered.

Generally, there is a high knowledge of the illegality of littering. The vast majority were aware that dropping something out of a moving vehicle (94%) is illegal. Knowledge of the illegality of releasing balloons is much lower (28% believe it is <u>legal</u> and 44% are unsure).

There is scope for improving knowledge around fines and reporting of littering, as only half (54%) of Queenslanders know that the state environmental department and local councils can issue fines for littering, and only a third (35%) are aware they can report littering from a vehicle.

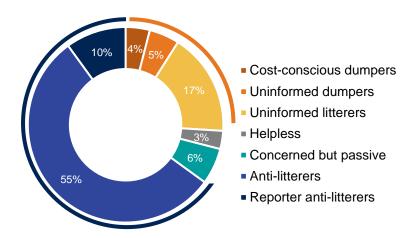
#### Social

Littering is considered highly unacceptable. A large majority of Queenslanders say dropping litter out of a vehicle is unacceptable (92%), that leaving waste in a stadium or cinema is unacceptable (86%) and leaving rubbish beside a full bin is unacceptable (72%).

However, there are mixed feelings about releasing balloons (51% say unacceptable), which is likely related to the lack of knowledge around the legality of this act.

## **Segmentation findings**

Seven distinct segments were identified in the Queensland community in relation to littering and dumping behaviours: three with poor waste disposal behaviours, two with anti-littering attitudes, and two that fall inbetween with a more varied range of behaviours and attitudes.



# A detailed profile of each segment can be found in the Section 5.2.Cost-conscious dumpers (4%)

The Cost-conscious dumpers segment is primarily males between 18-59 years. They are more likely to live in Brisbane than other segments and tend to be well educated, high earners and employed full-time.

#### How to target:

- Motivation: Increasing the awareness of fines and perceptions of the likelihood of being caught matches with this segment's motivations to reduce littering and dumping behaviours.
- Motivation: More research may be required to understand the influence of cost on this audience.
- Social: There is also scope to highlight acceptable behaviour/social norms, and increasing the segment's knowledge of which disposal behaviour are illegal.

## Uninformed dumpers (5%)

This segment is strongly represented among younger people (aged 18-39). In line with this, they are less likely to live in detached houses than others in the population.

#### How to target:

- Ability/Motivation: This segment is most likely to change behaviours by increasing their knowledge around
  littering and dumping. This includes their understanding of which disposal methods are illegal, how to report
  littering and dumping behaviours, and the negative impacts of littering and dumping on the environment.
- Social: Increasing the influence of social norm may also change their behaviour.

## Uninformed litterers (17%)

This segment is strongly represented among employed men.

#### How to target:

Ability/Motivation: As with Uninformed dumpers, behaviour change for Uninformed litterers may be assisted
by increasing their knowledge. This includes their understanding of which disposal methods are illegal, how

to report littering and dumping behaviours, and the negative impacts of littering and dumping on the environment.

 Motivation: Their littering behaviours may also change if they are made more aware of the likelihood of being caught and fined.

### Helpless (3%)

The demographic mix of this segment does not differ from that of the overall Queensland population.

How to target. This segment comprises only a small portion of the audience, and their lack of motivation and wide range of behaviours makes it a difficult segment to target.

### Concerned but passive (6%)

The demographic mix of this segment does not differ from that of the overall Queensland population.

#### How to target:

Motivation: Build perceptions of the likelihood of being caught.

### Anti-litterers (55%)

This segment is older (32% 60+ years), slightly more female (56%), are much more likely to live in a house (72%) and less likely to have full-time work (32%) than other segments.

#### How to target.

- Motivation: People in this segment are already socially conscious and providing messaging around the
  impacts of littering may not have a great influence on their behaviours. They would benefit from a greater
  perception of the chances of getting fined and are likely to respond well to environmental appeals.
- Ability/Motivation: Further research to understand how they can be mobilised as reporters may be valuable. Increasing their knowledge of avenues for reporting and the ease of doing so may be a good start.

## Reporter anti-litterers (10%)

This segment has a larger portion of Queenslanders outside of SEQ (ROQ) than other segments. They are less likely to be high earners or highly educated, and the majority are students or not working.

#### How to target.

- Ability/Motivation: People in this segment are already receptive to environmental and socially-conscious appeals and feel that the chances of being caught and fined are high.
- Motivation/Social: While many indicate that they are likely to report in the future, there is still a large
  proportion who indicate that they are unlikely to do so. Mobilising this nascent audience as reporters may
  be beneficial if this fits behavioural objectives.

## **Recommendations**

## Illegal dumping

The table below outlines the key findings of the research and recommendations aligned with each.

MAPPS domain	#	Finding overview	Recommendation
Motivation	1	Queenslanders believe that it is unlikely that they will be caught and fined for illegal dumping in most contexts.  Additionally, the reason many Queenslanders have for not reporting includes lack of motivation due to the belief that reporting would be a waste of time.	Increase the perceived likelihood of being caught and fined for illegally dumping.
	2	There is a low understanding of the value of fines for various illegal dumping acts, with most people overestimating fines for large scale illegal dumping and underestimating fines for small scale illegal dumping. When told the minimum fines for illegal dumping acts, most people (61%) considering large scale dumping fines are too low.	Increase awareness of the fines for illegal dumping.  Capitalise on Queenslanders likely being accepting of higher fines for serious dumping.
Ability	3	Knowledge of which organisations illegal dumping can be reported to is mixed. Most Queenslanders say they would report to local council (71%) followed by QLD Police Service (32%), and only 18% say they would report to DES.  Reasons for not reporting include lack of knowledge about the fact that illegal dumping <i>can</i> be reported, and about <i>how</i> to do so (29%).	Educate Queenslanders around reporting illegal dumping: that is possible, encouraged, and where to report.
	4	Only one in five Queenslanders know they are able to report dumping acts without a record of vehicle details.	Raise awareness that vehicle details are not needed to report illegal dumping.
	5	Knowledge about the legality of disposal options for large volumes of waste in a range of circumstances is also mixed. Two thirds of Queenslanders know that leaving furniture on the side of the road is illegal. Slightly more than half know that leaving household goods next to a charity bin is illegal, with 21% saying they're unsure whether it is illegal or not.	Educate Queenslanders about the legal status of dumping behaviours.
Social	6	23% of Queenslanders say the reason they don't report illegal dumping is being worried that the offender would find out.	Develop social norms around reporting illegal dumping.
	7	Illegal dumping is considered unacceptable by the vast majority of Queenslanders. Nine in 10 (92%) say leaving domestic waste in a park or bushland is unacceptable, 81% say that leaving green waste in a park is unacceptable and 78% say leaving household goods on the side of the road is unacceptable.	Capitalise on existing social norms around the unacceptability of illegal dumping.
	8	The most common social influence on dumping behaviour is local councils. Far fewer indicate that they are influenced by social media or work colleagues when it comes to dumping.	Utilise the reputation and reach of local councils to exert influence on dumping behaviours. Further investigation into the effectiveness of media campaigns may be required.

## Littering

Based on the findings of this research, there is considerable scope for reducing littering behaviour, with over half of Queenslanders admitting to some form of littering. The table below outlines the important findings of the research and recommendations aligned with each.

MAPPS			
domain	#	Finding overview	Recommendation
Motivation	1	Queenslanders believe that it is unlikely that they will be caught and fined for littering in most contexts, even more so than for illegal dumping.  Additionally, the reason many Queenslanders have for not reporting includes lack of motivation due to the belief that reporting would be a waste of time.	Increase the perceived likelihood of getting caught and fined for littering.
	2	Most Queenslanders understand that waste has as negative impact on the environment (78% 'quite' or 'very' big impact) and believe that they can make a positive difference to the environment (80%).	Capitalise on the environmental concerns in littering campaigns (although not to the exclusion of other motivations).
	3	While more people say they are responsible for managing littering (37%) compared to illegal dumping (22%), most Queenslanders see local councils as being responsible for dealing with littering (75%), followed by the State Government (35%).	Encourage residents to take personal responsibility for littering.
Ability	4	Knowledge of who to report littering acts to is moderate, with 13% of Queenslanders being unsure about which bodies they should report littering behaviour to. Two thirds (66%) would report to local councils, with 28% reporting to Qld Police Service, and only 13% indicating they would report to DES.  Many people also say that a reason they would not report littering is a lack of awareness that it can be reported, or of how to report.	Educate Queenslanders about reporting littering: that it is possible, encouraged, and where to report.
	5	Knowledge is low for releasing balloons (28% believe it is <u>legal</u> and 44% are unsure).  There are also mixed feelings about releasing balloons (51% say unacceptable), which is likely related to the lack of knowledge around the legality of this act.	Improve awareness about the illegality of releasing balloons.
Social	6	Littering is considered highly unacceptable. Large majorities of Queenslanders say dropping litter out of a vehicle is unacceptable (92%), that leaving waste in a stadium or cinema is unacceptable (86%) and leaving rubbish beside a full bin is unacceptable (72%).	Capitalise on existing social norms around the unacceptability of littering.

# 1 Background, method, and analysis

## 1.1 Background

## 1.1.1 Littering and illegal dumping in Queensland

### Context and existing research

Littering and illegal dumping is a major problem in Queensland, polluting our environment, costing millions of dollars to manage and clean-up each year, and impacting many of our public spaces.

For the purposes of this study, the definition of littering and illegal dumping (as defined by Queensland Department of Environment and Science) is the unlawful deposit of any type of waste material. These actions are defined as littering when the volume deposited is less than 200 litres (i.e. about the volume of a standard household wheelie bin), and illegal dumping when the volume is 200 litres or more.

There is little existing state-wide research on littering and dumping in Queensland. An analysis of a Queensland survey undertaken by DES in 2014 found that Queenslanders value a clean environment, but are not aware they can report littering and illegal dumping to DES:

- 94% of people agreed that they value a clean environment:
- Less than half (40%) of those surveyed were aware that they could report someone for littering or illegal dumping (the 2020 survey found this awareness had increased to 54%); and
- Of those, less than 9% (1% "Environment Department" and 8% "Other") identified State Government as "Who they would expect to report to?"

#### Behavioural interventions

Increased public knowledge of the correct ways to dispose of unwanted items, and education on the ways people can report offenders, coupled with greater awareness and enforcement of penalties, may help reduce the occurrence of littering and illegal dumping in Queensland.

There have been **no Queensland-wide awareness raising campaigns in relation to littering, illegal dumping or community-based reporting since 2014**. However, there have been targeted regional campaigns, such as the Beerburrum Forest Area, Far North Queensland and South West Queensland campaigns.

The Department of Environment and Science's Litter and Illegal Dumping Programs team **plan to conduct education and awareness raising activities** designed to reduce incidence of illegal dumping and littering. Local councils received funding from May/June 2020 to implement illegal dumping behaviour change projects that include advertising and education.

## 1.1.2 Objectives

The aims of this research were to develop a regular survey to explore litter and illegal dumping and explore Queenslanders awareness, attitudes and behaviours in relation to littering, illegal dumping and community-based reporting.

The specific objectives include:

- To understand the community's knowledge, attitudes and behaviours in relation to different forms of illegal dumping.
  - o including a range of locations, materials and scales of littering and dumping;
- To explore motivations for dumping and barriers preventing residents from changing their current behaviour;

- To understand the community's awareness of community-based reporting, State Government programs, and penalties;
- · To explore individuals' preparedness to report witnessed incidents; and
- To identify the groups that have the greatest potential to improve their waste disposal behaviours and who DES should target via programs.

## 1.2 Methodology

In order to meet the project objectives, an online survey was conducted among residents of Queensland.

The survey was conducted from  $26^{th}$  October  $-10^{th}$  November 2020, to achieve a total sample of n = 2,000 people aged 18 years and older. The sample was drawn from proprietary research panels. Quotas were set on age, gender and location.

### 1.2.1 Quotas and weighting

Non-interlocking quotas were set on the questionnaire sample, to ensure a representative sample of Queensland residents in the data, based on the 2016 ABS census data:

Total sampl	n=2,000	
Gender	Male	49%
	Female	51%
Age	18-29	21%
	30-39	17%
	40-49	18%
	50-59	17%
	60+	27%
Location	Metro	48%
	Regional	52%

All data has been weighted using 2016 ABS National and State Population statistics to ensure the data is representative of the Queensland population. Weights were applied on the following factors:

- Gender
- Age
- Location

## 1.2.2 Analysis

## Statistical significance testing

Analysis of survey data was carried out using SPSS and Q data analysis software (software packages used for statistical analyses in social research). Crosstab analysis was conducted on the following subgroups:

- Gender
- Age (18-39, 40-59, 60+)
- Location (Brisbane, SEQ, ROQ)
- Dwelling (house, unit/apartment)
- Employment (full-time, part-time, not working, student)

- Income (<\$40k, \$40k \$120k, \$120k+)</li>
- Culturally and linguistically diverse population (CALD, non-CALD)
- Littering behaviour (non-litterer, food-scraps litterer, occasional litterer, frequent litterer)
- Dumping behaviour (non-dumper, kerbside dumper, deliberate dumper)
- Reporting behaviour

Significance testing was conducted by comparing category/statement data. Significant differences are denoted by directional arrows ( Testistically higher or lower at 95% confidence level).

Significance testing was also conducted between subgroups by comparing subgroups to the total (e.g. females compared to the total).

Where there were more than two subgroups (e.g. age categories), a group reported in the findings as 'different' is significantly different from the average for all other groups for that question. Where there were two subgroups (e.g. male and female), we can say that the subgroups were significantly different from each other.

Analysis was not conducted on subgroups where the base size was less than n=30. Only instances where statistically significant differences were detected are mentioned in the report.

### Illegal dumpers

Waste disposal behaviours were analysed for waste volumes larger than a wheelie bin (>200L) and the respondents were allocated into one of four groups based on their self-reported illegal dumping behaviours. This was calculated using Question 2 ("And still thinking only about amounts larger than a wheelie bin load, how have you disposed of each of these things in the last 12 months?") and the three groups were:

- Non dumpers (n=1722, 86%)
  - o Respondents who did not report disposing of any large waste volumes illegally.
- Kerbside dumpers (n=181, 9%)
  - Respondents who reported disposing of large waste volumes by placing on the kerb outside their house (outside of council collection periods), but who had not undertaken any other illegal dumping behaviour.
- Deliberate dumpers (n=97, 5%)
  - Respondents who had disposed of large waste volumes by dumping it in a public place, on someone else's land or on the side of the road.

#### Litterers

Waste disposal behaviours were analysed for waste volumes smaller than a wheelie bin (200L) and the respondents were allocated into one of four groups based on their self-reported littering behaviours. This was calculated using Question 3 ("Please indicate how often you have thrown away any of the following items in public places without placing them in the bin?") and Question 4 ("Which of the following have you done in the past 12 months?") and the four groups were:

- Non litterers (n=951, 47%)
  - o Respondents who did not report disposing of any small waste illegally.
- Food-scraps litterers (n=195, 10%)
  - Respondents who reported occasionally or frequently disposing of food scraps without placing them in the bin, but not any other waste items.
- Occasional litterers (n=524, 26%)
  - Respondents who reported occasionally disposing of any small waste items without placing them in the bin, but not frequently for any items or behaviours (excluding only disposing food scraps).
- Frequent litterers (n=330, 17%)

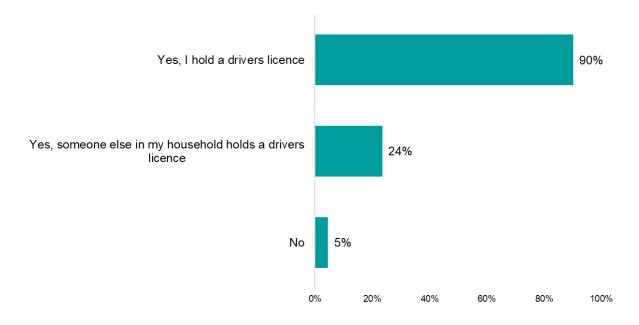
Respondents who reported *frequently* disposing of any small waste items without placing them in the bin (excluding only disposing food scraps).

## 1.2.3 Sample profile

The profile of the sample is shown in the figures below. These results are based on the weighted data.

SAMPLE		n=2000
Age	18-39	734
	40-59	712
	60+	554
Gender	Male	982
	Female	1007
	Other	7
	Prefer not to say	4
Location	Brisbane	512
	SEQ (excl. Brisbane)	917
	Rest of QLD	571

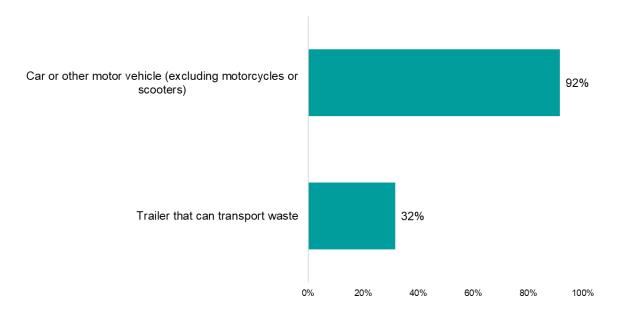
#### **Driver licence holder**



Base: All respondents, n=2000

Q33. Do you and/or any other members of your household hold a current driver's licence? Please select any that apply.

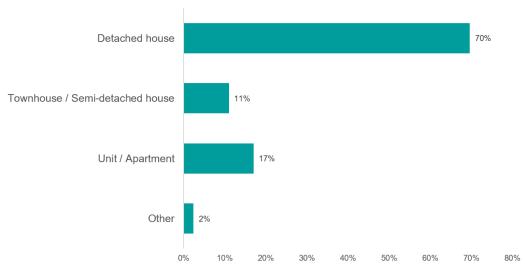
#### Access to car or trailer



Base: All respondents, n=2000

Q34. Does anyone in your household own or have access to:

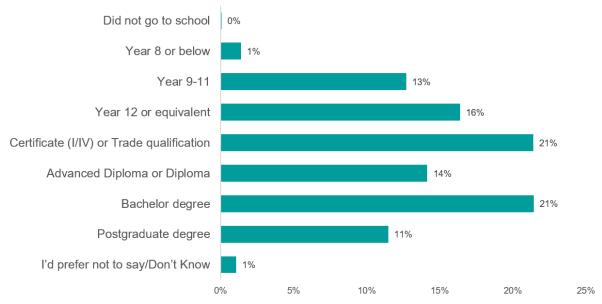
#### **Dwelling type**



Base: All respondents, n=2000

Q37. How would you best describe the type of dwelling you live in?

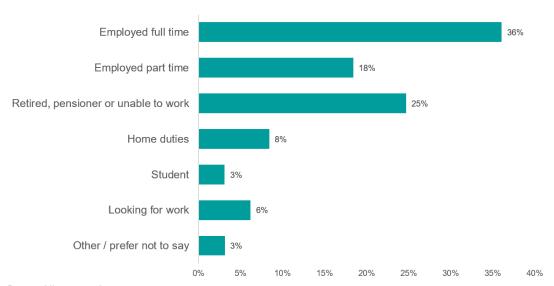
#### **Education**



Base: All respondents, n=2000

Q38. What is the highest level of education that you have completed so far?

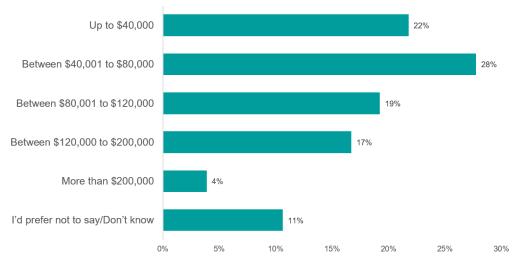
#### **Employment**



Base: All respondents, n=2000

Q39. Which of the following best describes your employment status?

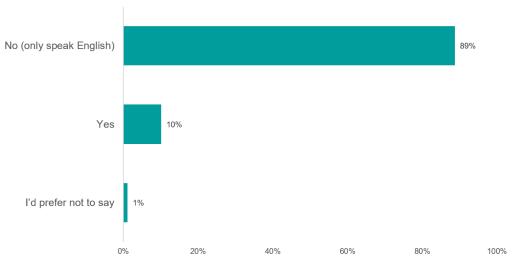
#### Income



Base: All respondents, n=2000

Q40. What is your approximate annual household income before tax? That is, the combined income of all members of your household.

#### **Culturally and linguistically diverse Queenslanders**



Base: All respondents, n=2000

Q41. Do you usually speak a language other than English at home?

## 2 Behavioural framework: MAPPS

The analysis and reporting approach for this research utilises the MAPPS (Motivation, Ability, Processes, Physical and Social) behavioural framework. Ipsos uses this framework to better understand why people behave as they do, to build our understanding of littering and dumping behaviours and how to best go about changing their behaviour.

MAPPS considers the strengths of the COM-B model of behaviour change (Michie's et al, 2011: <a href="https://www.researchgate.net/publication/51070630">https://www.researchgate.net/publication/51070630</a> The Behaviour Change Wheel a new method for characterising and designing behaviour change interventions), which conceptualises behaviour change as being the product of the interaction between people's capability, motivation and opportunity to change. MAPPS has the added flexibility and ability to account for the other major behaviour change models as well as insights on behaviour from many areas of behavioural science (including sociology, human ethology and neuroscience). The framework provides a robust approach to help ensure that our understanding of behaviour includes a comprehensive account of the all relevant drivers of the behaviour.

In MAPPS, the antecedents to behaviour change are operationalised in the following way:

- Personal factors: Our motivation and ability to perform the behaviour forces that reflexively, habitually and
  reflectively impact our motivation and those that inhibit or enhance our ability to perform a behaviour. Five
  internal forces constantly shape motivation and ability: goals, pathways, cognitive mechanisms, (negative)
  emotion and effort (including cognitive costs). These five forces also interact with the physical, social and
  cultural environments that make up the context of behaviour.
- Situational factors: Reflect the social forces bearing on our behaviour as well as the physical and temporal environment (moment, time, season, etc.) that can greatly impact our perceptions of a situation, the impression we form and the behaviour we engage in through various triggers.

Using the MAPPS framework helps when trying to understand how or why behaviour happens or does not happen. In doing so we would ask:

- Which people show the behaviour or make the decision more than others?
- What is the context of the behaviour and when does the behaviour take place (or needs to take place)?
- How are choices and options presented and perceived by people?
- What information, knowledge and skill do people have (and need) in relation to the behaviour?
- What motivates the behaviour, reflexively (automatically) or reflectively (careful thinking)? Are people's impressions and judgment affected by some bias? Are they adopting shortcuts in the decision process?
- What social forces bear upon the decision or behaviour?
- The key question always remains: what needs to change so that behaviour changes?

Each question in the questionnaire has an associated MAPPS domain, shown in the Appendix (Section 5.4). The MAPPS framework is also used to cover the behaviours and perceptions in the segmentation (Section 4).

**MAPPS Behaviour Change Framework** 

MAPPS DIMENSION	MAPPS CATEGORY	WHAT IT MEANS	
Motivation	Outcome expectations	I don't think it will work	
	Emotion Internalisation Identity Self-efficacy	I'm not feeling like doing it I don't want to do it I'm not that kind of person I don't feel able to do it	
Ability	Capability	I don't have the skills to do it	
	Routines	It's not part of what I usually do	
Processing	Decision forces	How things are processed	
Physical	Environmental factors	How things are set up	
Social	Social Norms	What's expected of us	
	Cultural norms	The way we live	

# 3 Findings

### 3.1 Behaviours

### 3.1.1 Disposal behaviours for large volumes of waste

Figure 1 shows the types of items disposed of by Queenslanders in amounts larger than a wheelie bin load in the last 12 months. At least half of Queensland residents have disposed of household recyclables (51%) or green waste (50%). More than two in five (42%) indicated general domestic waste in large amounts, and around one in three have disposed of furniture, white goods or bulky household items (37%) and clothing (29%).

Fewer surveyed respondents have disposed of construction and/or demolition materials (14%), hazardous chemicals (8%), tyres (5%) and asbestos (3%), while one in five (21%) indicated they have not disposed of any of the items in the list in these volumes.

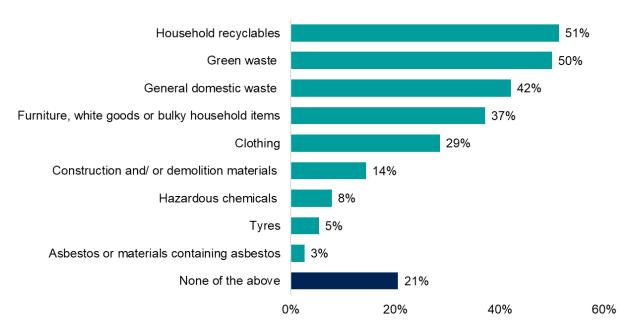


Figure 1. Items disposed of in last 12 months

Base: All respondents, n=2000

Q1. Thinking only about amounts larger than a wheelie bin load, which of the following have you disposed of from your household in the last 12 months? Please select any that apply

Significant differences in demographics and behavioural groups observed for the top three items include:

#### 1. Household recyclables - 51% Queenslanders

- aged 18-39, 61%▲
- CALD, 60%
- degree+, 56%▲

- ♀ female, 55%▲
- . O male, 48%▼
- non dumpers, 48%

  ▼
- ¶ aged 60+, 41%▼
- non-CALD, 50%▼

#### 2. Green waste - 50% Queenslanders

- to household income > \$120,000, 60%▲
- ■ food-scraps litterers, 58%▲
- detached house, 57%▲
- employed full time, 54%▲
- year 12 or less, 46%▼
- non dumpers, 47%
  ▼
- Los household income up to \$40,000, 43%▼
- Brisbane, 42%▼
- unit/townhouse/other, 33%▼

### 3. General domestic waste - 42% Queenslanders

- CALD. 54%
- ¶ aged 18-39, 53%▲
- frequent litterers, 50%▲
- unit/townhouse/other, 47%▲
- degree+, 47%▲
- non-CALD, 41%▼
- detached house, 40%▼
- non litterers, 39%▼
- not working, 38%▼
- non dumpers, 38%▼
- **n** aged 60+, 30%▼

### 3.1.2 Disposal locations for large volumes of waste

Table 1 shows disposal locations for volumes of waste larger than a wheelie bin load. Figures shown are the proportions of participants who disposed of each type of waste in each location.

Among those who have disposed of general domestic waste and household recyclables in volumes larger than a wheelie bin load, the weekly or fortnightly council collection of general waste and recycling is the most common disposal method (57% for general domestic waste and 49% for recyclables). Landfill is the next most common disposal option use (31% for household waste and 30% for recyclables.

Three in four of those disposing of clothing (75%) did so at charity or donation bins and 41% of those disposing of asbestos material did so by paying a waste removal service.

For all the other items, landfill or rubbish tip is the most common disposal location:

- Construction or demolition materials, 62%;
- Hazardous chemicals, 61%;
- Green waste, 55%;
- Furniture, white goods or bulky items, 49%; and
- Tyres, 45%.

Overall, 14% of Queenslanders report disposing of volumes of items larger than a wheelie bin load via illegal methods. More than one in 10 (12%) have placed items on the road outside their home. Far fewer report leaving items on the side of the road elsewhere or on public land (3%) or someone else's land (3%)

Table 1. Disposal location by item

%	Total	General domestic waste	Household recyclables	Furniture, white goods or bulky household items	Clothing	Hazardous chemicals	Construction or demolition materials	Asbestos or material containing asbestos	Green waste	Tyres
Weekly/fortnightly council kerbside collection of general waste and recycling	36%	57%	49%	8%	14%	13%	12%	19%	29%	9%
Council kerbside collection of large or bulky items	13%	9%	9%	18%	4%	4%	8%	10%	5%	12%
Disposed of at a landfill, rubbish tip or transfer station	47%	31%	30%	49%	12%	61%	62%	26%	55%	45%
Paid a waste removal service	12%	6%	5%	7%	4%	18%	19%	41%	10%	12%
Taken to a charity shop or donated in a bin	32%	8%	17%	21%	75%	8%	8%	16%	3%	10%
Sold it/gave it away/had someone pick it up	25%	7%	15%	34%	29%	10%	14%	16%	4%	21%
Disposed of on your own land	10%	3%	3%	2%	4%	7%	6%	15%	15%	7%
Other	1%	0%	1%	0%	0%	0%	0%	2%	1%	2%
Placed on the side of the road outside your house/building outside scheduled council collection	12%	10%	9%	10%	5%	9%	7%	20%	6%	16%
Placed on side of road elsewhere	3%	2%	1%	1%	1%	6%	3%	17%	1%	6%
Disposed of on public land or someone else's land	3%	2%	1%	2%	2%	5%	4%	12%	2%	7%
Column n	1570	821	991	737	566	152	284	51	993	101
Proportion of total population disposing of material	79%	42%	51%	37%	29%	8%	14%	3%	50%	5%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Base: All respondents, n=2000

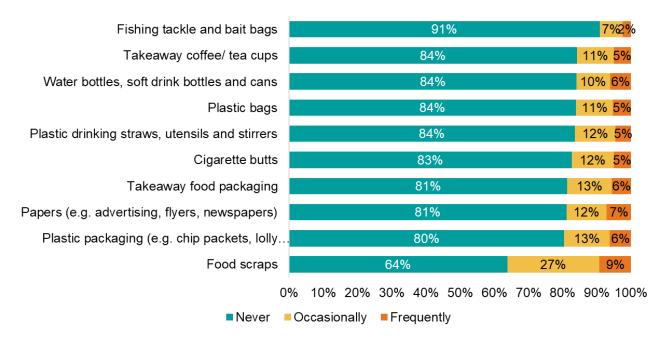
Q2. And still thinking only about amounts **larger than a wheelie bin load**, how have you disposed of each of these things in the last 12 months? Please select any that apply.

Note that figures shown are column percentages. Figures in each column do not add to 100% because participants were able to select multiple responses per column.

### 3.1.3 Littering behaviours

Figure 2 shows the frequency of littering in public places. Littering frequency is consistently low for all items except for food scraps. With the exception of food scraps, at least four in five (80%) Queenslanders indicate they've never thrown away each type of litter item without placing them in a bin. This non-littering behaviour drops to 64% for food scraps. Queenslanders are also more likely to indicate they frequently litter papers (7%) than other items.

Figure 2. Littering frequency

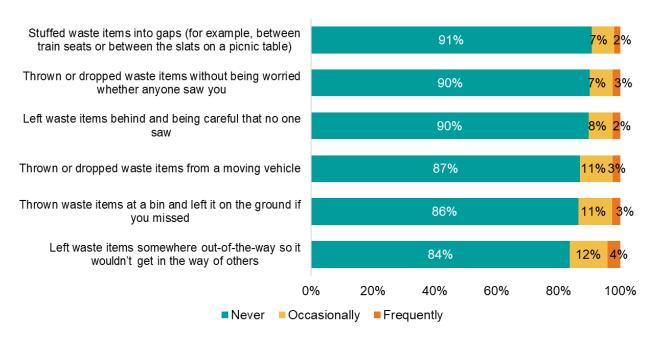


Base: All respondents, n=2000

Q3. Please indicate how often you have thrown away any of the following items in public places without placing them in the bin?

Figure 3 shows Queenslanders' littering behaviours in the past 12 months. At least five in six (84%) have not undertaken any of the listed littering behaviours within the 12-month period.

Figure 3. Littering behaviours in last 12 months



Base: All respondents, n=2000

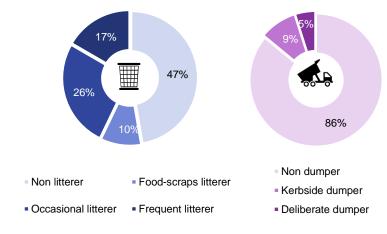
Q4. Which of the following have you done in the past 12 months?

### 3.1.4 Illegal waste disposal categories

Figure 4 shows the proportion of the sample that falls into the illegal waste disposal categories. A full description of the construction of these groupings is included in Section 1.2.2, Analysis. Just under half of Queenslanders indicate they never litter (47%), with another one in ten say they <u>only</u> litter food scraps (10%). A quarter (26%) litter occasionally and 17% litter frequently.

By comparison, far fewer people indicate they dump waste in larger volumes (86% are non-dumpers). Just under one in 10 Queenslanders (9%) dump only at kerbside, and only 5% dump deliberately at locations other than kerbside (*Deliberate dumpers*).

Figure 4. Litterer and dumper categories



Base: All respondents, n=2000

Litterer: Q3. Please indicate how often you have thrown away any of the following items in public places without placing them in the bin? Q4. Which of the following have you done in the past 12 months?

Dumper: Q2. And still thinking only about amounts larger than a wheelie bin load, how have you disposed of each of these things in the last 12 months? Please select any that apply.

Significant differences in demographics and behavioural groups observed for these categories include:

#### 1. Litterers – 17% frequent litterers

More likely to be frequent litterers:

- O male, 21%▲
- ¶ aged 18-39, 24%▲
- Brisbane, 22%▲
- unit/townhouse/other, 22%
- employed full time, 22%▲
- bousehold income > \$120,000, 22%
- deliberate dumpers, 58%▲
- reported littering/illegal dumping, 31%▲

#### 2. Dumpers - 5% deliberate dumpers

More likely to be deliberate dumpers:

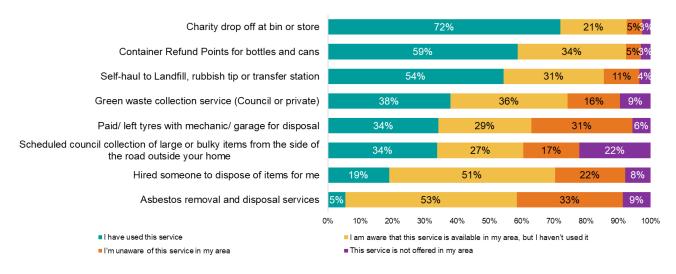
- ¶ aged 18-39, 9%▲
- Brisbane, 9%
- . O male, 6%▲
- • employed full time, 8%▲
- frequent litterers, 20%▲
- reported littering/illegal dumping, 11%▲
- unit/townhouse/other, 7% •
- Los household income > \$120,000, 9%▲
- degree+, 9%▲
- CALD, 8%

## 3.1.5 Other waste disposal behaviours

Figure 5 shows the usage and awareness of different types of waste services in the past 12 months. Charity bin or store is the most commonly used service by Queensland residents (72%), followed by container refund points (59%) and landfill or rubbish tip (54%). More than one in five Queenslanders (22%) indicated the

kerbside collection for bulk items service is not offered in their areas. This number may have been inflated due to suspension of council kerbside bulky waste collection service in Brisbane due to the COVID-19 pandemic.

Figure 5. Waste services usage in last 12 months



Base: All respondents, n=2000

Q5. Are you aware of the following waste services in your area, and have you used them in the past 12 months?

Demographic and behavioural groups significant differences observed for top three waste services used:

#### 1. Charity drop off at bin or store - 72% of Queenslanders have used

- ¶ aged 60+, 78%▲
- ♀ female, 77%▲
- detached house, 76%▲
- non-CALD, 74%
- John non dumpers, 73%▲
- deliberate dumpers, 50%▼

#### 2. Container Refund Points for bottles and cans - 59%

- Rest of Queensland, 66%▲
- detached house, 63%▲
- frequent litterers, 50%▼
- deliberate dumpers, 35%▼

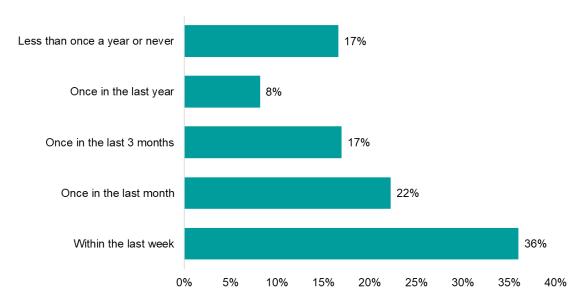
### 3. Self-haul to landfill, rubbish tip or transfer station - 54%

- ¶ aged 40-59, 59%▲
- detached house, 62%▲

- Rest of Queensland, 61% household income > \$120,000, 61% employed full time, 59% non-CALD, 56%
- Los household income up to \$40,000, 48%▼

Figure 6 shows the litter pick-up behaviour among Queenslanders, with more than half (58%) indicating they have picked up litter within the last week (36%) or month (22%). Only one in six (17%) have not done it in the past year or have never done it.

Figure 6. Picking up litter



Base: All respondents, n=2000

Q30. How often do you pick up litter that you see? (e.g. drink containers, soft plastic, etc).

Significant differences observed for litter picking up:

#### 1. Queenslanders who have picked up litter within the last week - 36%

Brisbane, 28%▼
reported littering/illegal dumping, 53%▲
never reported littering/illegal dumping, 34%▼
frequent litterers, 28%▼

#### 2. Queenslanders who have picked up litter less than once a year or never - 17%

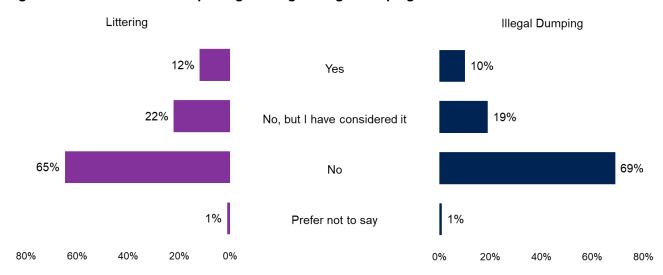
- household income > \$120,000, 11%▼

  image: non litterers, 20%▲
- ☐ food-scraps litterers, 9%▼
- J⁵ non dumpers, 18%▲
- never reported littering/illegal dumping, 18%▲
- reported littering/illegal dumping, 6%▼

## 3.1.6 Past reporting behaviour

Figure 7 shows Queenslanders' past behaviours on reporting littering or illegal dumping. The proportion of those that have reported compared with those that have not or have considered it are similar for both. Majority indicated they have not reported littering (65%) or illegal dumping (69%), while only one in ten have taken action to report littering (12%) or illegal dumping (10%). About one in five said they have not but have considered doing it (littering, 22% and illegal dumping, 19%).

Figure 7. Past behaviour on reporting littering or illegal dumping



Base: All respondents, n=2000

Q25. Have you ever reported a littering or illegal dumping act?

Significant differences observed for reporting:

#### 1. Queenslanders who have previously reported littering – 12%

- frequent litterers, 22%
- deliberate dumpers, 27%▲
- ¶ employed full time, 16%▲

- tousehold > \$120,000, 16%▲
- . O male, 15%▲
- degree+, 15%▲
- ■ non dumpers, 11%▼
- occasional litterers, 9%▼
- ¶ employed part time, 7%▼

#### 2. Queenslanders who have previously reported illegal dumping - 10%

- deliberate dumpers, 23%
- frequent litterers, 18%
- tousehold > \$120,000, 16%▲
- . O male, 14%▲
- ¶ aged 40-59, 14%▲
- ¶ aged 18-39, 8%▼
- Lousehold \$40,000-\$120,000, 8%▼
- ♀ female, 7%▼
- occasional litterers, 7%▼

## 3.1.7 Dumping behavioural profile of demographic subgroups

The table below shows the dumping behavioural profile of each of the demographic subgroups.

		Non dumper	Kerbside dumper	Deliberate dumper	Total
	n=	1 <i>7</i> 22	181	97	2000
	%	86%	9%	5%	100%
Gender	Male	85%	9%	6% ↑	49%
Gender	Female	87%	10%	4% ↓	51%
	18-39 years	79%↓	12% ↑	9% ↑	38%
Age	40-59 years	87%	10%	3% ↓	35%
	60+ years	94% ↑	5% ↓	1% ↓	27%
	Brisbane	81%↓	10%	9% ↑	25%
Region	SEQ (Except Brisbane)	88%	9%	3% ↓	45%
	ROQ	87%	9%	4%	30%
	Non litterer	92% ↑	7% ↓	1% ↓	47%
Litterer	Food scraps litterer	90%	9%	1% ↓	10%
Litterer	Occasional litterer	87%	10%	3%	26%
	Frequent litterer	66%↓	14% ↑	20% ↑	17%
Reported	Yes	78% ↓	11%	11% ↑	12%
reported	No	87% ↑	9%	4% ↓	87%
Dwelling	Detached house	87%	9%	4% ↓	70%
Dwelling	Unit / townhouse / other	85%	9%	7% ↑	30%
	Completed yr 12 or less	88%	10%	2% ↓	31%
Education	Certificate/trade/diploma	88%	8%	4%	36%
	Degree+	82%↓	9%	9% ↑	33%
	Employed full time	82%↓	10%	8% ↑	36%
	Employed part time	86%	10%	5%	18%
Employment	Not working	90% ↑	8%	2% ↓	39%
	Student	81%	13%	6%	3%
	Other / prefer not to say	86%	9%	5%	3%
	Up to \$40,000	89% ↑	9%	2% ↓	22%
Income	Between \$40,001 to \$120,000	87%	8%	5%	47%
HIOOHIG	More than \$120,000	80%↓	11%	9% ↑	21%
	I'd prefer not to say/Don't know	86%	11%	3%	11%
CALD	No (only speak English)	87% ↑	8%↓	4%↓	89%
OALD	Yes	77%↓	14% ↑	8% ↑	10%

#### 3.2 Motivation

## 3.2.1 Motivations for dumping

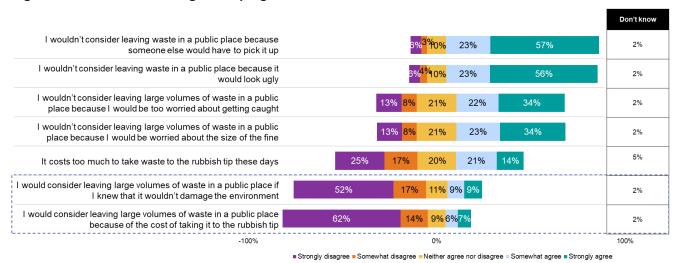
Figure 8 shows participants' level of agreement with statements about motivations relating to illegal dumping behaviour.

Financial considerations are a potential driver of dumping for a significant proportion of Queenslanders. More than a third (35%) of Queenslanders agree that it costs too much to take waste to the tip, although only 13% agree that they would consider dumping because of the cost.

The top two reasons for avoiding dumping are social: consideration that others 'would have to pick it up' (57% – strongly agree) and aesthetic reason that 'it would look ugly' (56% – strongly agree). Around 10% of Queenslanders feel that these considerations don't come into play in their decisions about dumping.

Concerns about being caught and/or fined are less influential, but still impact the decisions of more than half of Queenslanders (56% wouldn't dump because they are worried about being caught, and 57% because they are worried about being fined).

Figure 8. Motivations for illegal dumping

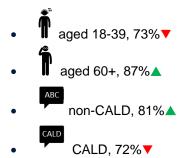


Base: All respondents, n=2000

Q15. Now for items larger than a wheelie bin load, please indicate how much you agree or disagree with each of the following statements.

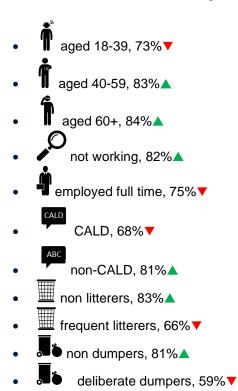
Significant differences between demographic groups are shown for net agreement (i.e. somewhat/strongly agree) with the top two motivations on illegal dumping:

'I wouldn't consider leaving waste in a public place because someone else would have to pick it up'
 - 80% agree



- non litterers, 84%
- non dumpers, 81%▲
- deliberate dumpers, 66%▼

#### 2. 'I wouldn't consider leaving waste in a public place because it would look ugly' - 79% agree

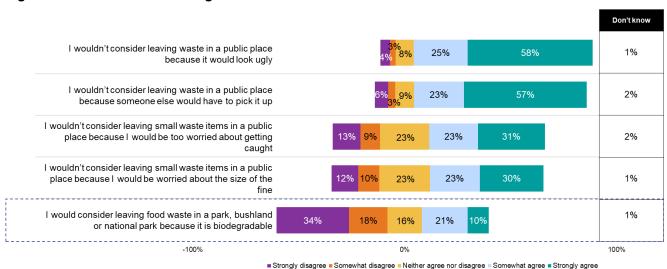


## 3.2.2 Motivations for littering

Figure 9 shows motivations for littering behaviours. Like illegal dumping, aesthetic and social reasons are the top two factors discouraging Queenslanders from littering, while being caught and fined remain less substantial:

- 'I wouldn't consider leaving waste in a public place because it would look ugly', 58% strongly agree; and
- 'I wouldn't consider leaving waste in a public place because someone else would have to pick it up', 57% strongly agree.

Figure 9. Motivations for littering



Base: All respondents, n=2000

Q14. For items smaller than a wheelie bin load, please indicate how much you agree or disagree with each of the following statements.

Significant differences between demographic groups are shown for net agreement (i.e. somewhat/strongly agree) with the top two motivations on littering:

1. 'I wouldn't consider leaving waste in a public place because it would look ugly' - 84%

- aged 18-39, 78%▼
- **1** aged 60+, 89%▲
- CALD, 75%
- non-CALD, 85%
- non litterers, 88%

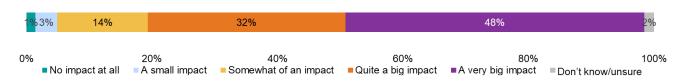
- non dumpers, 85% ▲
- deliberate dumpers, 69%▼
- 2. 'I wouldn't consider leaving waste in a public place because someone else would have to pick it up' 80%
- aged 18-39, 77%▼
- detached house, 82%▲
- unit/townhouse/other, 76%▼
- non-CALD, 82%▲

- non litterers, 85%▲
- non dumpers, 81%
   non dumpers, 81%

## 3.2.3 Environmental impact of waste items

Figure 10 shows how Queensland residents view the impact of waste items on the overall environment. The vast majority indicate waste items have a big impact ('quite a big impact' 32% and 'a very big impact' 48%), while only 1% and 3% indicated 'no impact at all' and 'a small impact', respectively.

Figure 10. Impact of waste items on the environment



Base: All respondents, n=2000

Q12. How much of a negative impact do you think waste items left behind have on the overall environment?

Significant differences observed among those indicating a big impact shown as below:

#### 1. NET big impact (i.e. quite a big impact/a very big impact) - 79%

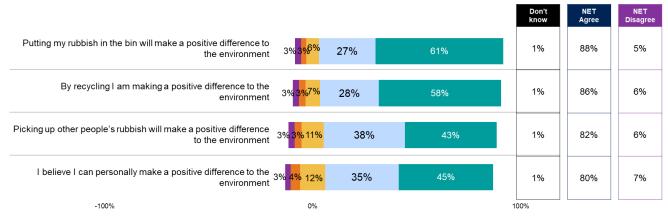
- ♀ female, 84%▲
- . O male, 74%▼
- ■ non dumpers, 81% ▲
- deliberate dumpers, 57%▼
- mon litterers, 84%▲
- frequent litterers, 66%▼

## 3.2.4 Motivations for pro-environmental behaviours

Figure 11 shows motivations for Queenslanders' pro-environmental behaviours. Overall, the majority agree with all statements – at least 80% either somewhat or strongly agreed. In particular, Queensland residents strongly agree that actions below will make a positive difference to the environment:

- Putting rubbish in the bin, 61%; and
- Recycling, 58%.

Figure 11. Motivations for pro-environmental behaviours



■ Strongly disagree ■ Somewhat disagree ■ Neither agree nor disagree ■ Somewhat agree ■ Strongly agree

Base: All respondents, n=2000

Q8. To what extent do you personally agree or disagree with each of the statements below?

Significant differences for different statements are noted and shown below:

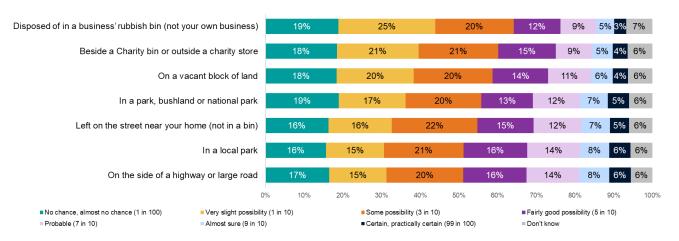
1. 'Putting my rubbish in the bin will make a positive difference to the environment' - 88%

- ¶ aged 60+, 91%▲
- non-CALD, 88%▲
- ☐ frequent litterers, 77%▼
- non dumpers, 89%▲
- deliberate dumpers, 77%▼
- 2. 'By recycling I am making a positive difference to the environment' 86%
- ¶ aged 60+, 90%▲
- frequent litterers, 76%▼
- 3. 'Picking up other people's rubbish will make a positive difference to the environment' 82%
- non litterers, 85%

## 3.2.5 Likelihood of being caught and fined for illegal dumping

Figure 12 shows how Queensland residents perceive the possibility of getting caught and fined for illegal dumping. Overall, at least 17% of Queenslanders think there is almost no chance (1 in 100) of getting caught and fined for illegal dumping in any of the scenarios, with the lowest likelihood (i.e. no chance, very slight and some possibility) of being caught for disposing of waste in a business' rubbish bin (64%) and beside a charity bin (60%).

Figure 12. Perception of getting caught and fined for illegal dumping



Base: All respondents, n=2000

Q17. Thinking about items larger than a wheelie bin, how likely do you think it is that you would be caught and fined if you were leaving waste in the following locations?

Significant differences observed for perceptions of the likelihood of being caught and fined are shown below – percentages are based on the top three responses (i.e. probable, almost sure and certain).

#### 1. 'Disposed of in a business' rubbish bin (\*not your own business)' - 17%

- ¶ aged 18-39, 21%▲
- **T** aged 60+, 13%▼
- non dumpers, 15%▼
- frequent litterers, 29%
- reported littering/illegal dumping, 24%▲
- never reported littering/illegal dumping, 16%▼
- year 12 or less, 21%▲

#### 2. 'Beside a Charity bin or outside a charity store' - 19%

- non dumpers, 17%▼
- deliberate dumpers, 30%▲
- occasional litterers, 14%▼
- reported littering/illegal dumping, 29%▲
- never reported littering/illegal dumping, 17%▼

#### 3. 'On a vacant block of land' - 21%

- ■ non dumpers, 19%▼
- deliberate dumpers, 37%▲
- ≡ frequent litterers, 28%▲
- reported littering/illegal dumping, 32%▲
- never reported littering/illegal dumping, 19%▼

## 4. 'In a park, bushland or national park' - 25%

- ¶ aged 18-39, 31%▲
- non dumpers, 23%▼

## 5. 'Left on the street near your home (not in a bin)' - 25%

- non dumpers, 23%▼
- deliberate dumpers, 41%▲
- reported littering/illegal dumping, 34%▲
- never reported littering/illegal dumping, 23%▼

### 6. 'In a local park' - 27%

• ¶ aged 18-39, 31%▲

#### 7. 'On the side of a highway or large road' - 27%

- ¶ aged 18-39, 35%▲
- **1** aged 60+, 20%▼
- ■ non dumpers, 25%▼
- frequent litterers, 35%
- reported littering/illegal dumping, 36%▲
- never reported littering/illegal dumping, 26%▼
- CALD, 36%▲

## 3.2.6 Likelihood of being caught and fined for littering

Figure 13 shows perception of getting caught and fined for littering among Queenslanders. Compared to illegal dumping, Queenslanders tend to feel that they are unlikely to be caught and fined for littering. At least 23% indicate that there is almost no chance (1 in 100) of being caught and fined for littering in any of the situations. Queenslanders also are more likely to feel that they will be caught and fined for littering out of a moving vehicle than in other settings. They are also significantly more uncertain about their chances of getting caught and fined for releasing balloons (11%).

Placed a bottle or can beside an overflowing bin 34% 28% 13% 26% Left a bottle or can on the street 31% Left food scraps in a park, bushland or national park Releasing balloons as part of a celebration 30% 24% 20% 30% 10% Dropped cigarette butts out of a moving vehicle 19% Dropped a small bag of rubbish out of a moving vehicle 23% 19% 13% 10% 10% 20% 40% 50% 60% No chance, almost no chance (1 in 100) Very slight possibility (1 in 10) Some possibility (3 in 10) Fairly good possibility (5 in 10) Probable (7 in 10) Almost sure (9 in 10) ■ Certain, practically certain (99 in 100) ■ Don't know

Figure 13. Perception of getting caught and fined for littering

Base: All respondents, n=2000

Q16. Thinking about small items, how likely do you think it is that you would be caught and fined in the following situations?

1. Significant differences observed for perceptions of the likelihood of being caught and fined are shown below – percentages are based on the top three responses (i.e. probable, almost sure and certain).

#### 'Placed a bottle or can beside an overflowing bin' - 10%

- ¶ aged 18-39, 14%▲
- non dumpers, 9%▼
- deliberate dumpers, 31%▲
- non-litterers and food scraps litterers, 8% and 4%▼
- frequent litterers, 24%▲
- reported littering/illegal dumping, 23%▲
- never reported littering/illegal dumping, 8%▼
- detached house, 9%▼
- unit/townhouse/other, 13%▲
- employed full time, 13%
- 2. 'Left a bottle or can on the street' 12%

- on dumpers, 11%▼
- deliberate dumpers, 26%▲

- reported littering/illegal dumping, 23%▲
- never reported littering/illegal dumping, 11%▼

## 3. 'Left food scraps in a park, bushland or national park' - 13%

- non dumpers, 12%▼
- deliberate dumpers, 34%▲
- ■ food scraps litterers, 4%▼
- frequent litterers, 27%
- reported littering/illegal dumping, 24%▲
- never reported littering/illegal dumping, 12%▼

#### 4. 'Releasing balloons as part of a celebration' - 11%

- I non dumpers, 9%▼
- kerbside dumpers and deliberate dumpers, 17% and 27% ▲
- occasional litterers, 7%▼
- frequent litterers, 21%
- reported littering/illegal dumping, 25%▲
- never reported littering/illegal dumping, 9%▼
- detached house, 9%▼
- unit/townhouse/other, 15%▲
- . degree+, 14%▲

### 5. 'Dropped cigarette butts out of a moving vehicle' - 18%

- ¶ aged 60+, 14%▼
- ■ non dumpers, 17%▼
- frequent litterers, 28%
- reported littering/illegal dumping, 29%▲

never reported littering/illegal dumping, 17%▼

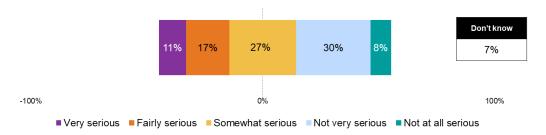
#### 6. 'Dropped a small bag of rubbish out of a moving vehicle' - 21%

- aged 18-39, 26%▲
- ¶ aged 60+, 16%▼
- ☐ frequent litterers, 30%▲
- reported littering/illegal dumping, 29%▲
- never reported littering/illegal dumping, 19%▼
- Lo household \$40,000-\$120,000, 24%▲

## 3.2.7 Extent of illegal dumping problem

Figure 14 shows how serious surveyed respondents consider illegal dumping as a problem locally. More than one in four (28%) view illegal dumping as either 'fairly' (17%) or 'very serious' (11%) in their local areas. While 38% indicating it as 'not very' (30%) or 'not at all serious' (8%).

Figure 14. Illegal dumping problem in local area



Base: All respondents, n=2000

Q19. How much of a problem do you consider illegal dumping to be in your local area?

Significant differences observed are shown below:

#### 1. NET serious (fairly/very serious) - 28%

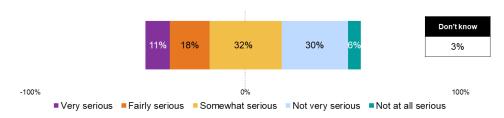
- ¶ aged 18-39, 32%▲
- aged 60+, 21%▼
- Brisbane, 22%▼
- Rest of Queensland, 35%
- employed full time, 32%▲
- ☐ frequent litterers, 40%▲

- deliberate dumpers, 43%▲
- reported littering/illegal dumping, 47%▲
- never reported littering/illegal dumping, 26%▼

## 3.2.8 Extent of littering problem

Figure 15 shows how Queensland residents view littering as a problem locally. Like illegal dumping, 29% consider littering as 'fairly' (18%) or 'very serious' (11%). On the other end of spectrum, 36% consider it as either 'not very serious' (30%) or 'not at all serious' (6%) problem.

Figure 15. Littering problem in local area



Base: All respondents, n=2000

Q18. How much of a problem do you consider litter to be in your local area?

Significant differences in littering problem observed are shown below:

#### 1. NET serious (fairly/very serious) - 29%

- ¶ aged 18-39, 34%▲
- **1** aged 60+, 19%▼
- Rest of Queensland, 35%▲
- employed full time, 32%▲
- \$\infty\$ student, 44%▲
- not working, 24%▼
- frequent litterers, 38%
- reported littering/illegal dumping, 46%▲
- never reported littering/illegal dumping, 26%▼

## 3.2.9 Responsibility for addressing the problem

Figure 16 shows the perception of responsibility around addressing littering and illegal dumping issues. The majority indicate that local councils are responsible for both littering (75%) and illegal dumping (77%). Many Queenslanders see also themselves having a role to play, with 37% saying they are responsible for addressing littering and 22% illegal dumping. On the other hand, the State Government is more often seen to be responsible for addressing illegal dumping (46%) than littering (35%).

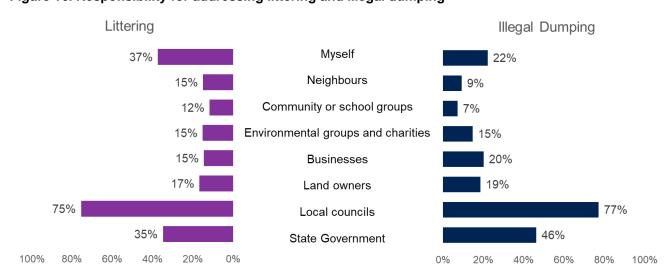


Figure 16. Responsibility for addressing littering and illegal dumping

Base: All respondents, n=2000

Q20. Who do you think is most responsible for addressing the issues of littering and illegal dumping? Please select up to three each for littering and illegal dumping.

Significant differences observed:

#### 1. 'Myself' as responsible for littering - 37%

- female, 34%▼
   male, 41%▲
   aged 18-39, 31%▼
   aged 60+, 46%▲
   reported littering/illegal dumping, 46%▲
   employed part time, 31%▼
   not working, 42%▲
- 2. 'Myself' as responsible for illegal dumping 22%
- P female, 19%▼

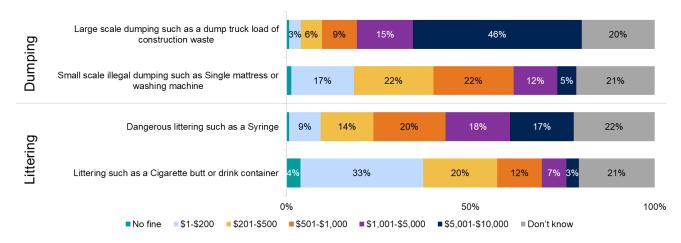
- O male, 25%▲
- ¶ aged 18-39, 17%▼
- aged 60+, 28%▲

## 3.3 Fines

## 3.3.1 Perception of minimum fines

Figure 17 shows the perception of minimum on-the-spot-fine for littering and illegal dumping actions. In general, Queenslanders think there is a larger fine (more than \$5,000) for large scale dumping (46%) and dangerous littering (17%) compared with small scale dumping (5%) and littering (3%). Interestingly, at least one in five have no idea what the minimum fine would be.

Figure 17. Perception of minimum on-the-spot-fine



Base: All respondents, n=2000

Q27. How much do you think the minimum on-the-spot-fine, if any, would be for disposing of the following types of waste in a public place?

Significant differences observed for perceptions of minimum on-the-spot-fine for littering and illegal dumping actions are shown below. Proportions shown are proportion who believe fines are between \$501 and \$10,000.

#### Large scale dumping – 71%

- ¶ aged 18-39, 67%▼
- ¶ aged 60+, 75%▲
- non-dumpers, 72%
- deliberate dumpers, 53%▼
- frequent litterers, 60%▼
- reported littering/illegal dumping, 78%▲
- detached house, 73%▲

- unit/townhouse/other, 65%▼
- **L**S household income > \$120,000, 77%▲
- non-CALD, 72%▲

#### 2. Small scale dumping - 39%

- ¶ aged 60+, 33%▼
- reported littering/illegal dumping, 54%▲
- never reported littering/illegal dumping, 37%▼
- detached house, 41%
  ▲
- unit/townhouse/other, 33%▼
- employed full time, 44%▲
- household income > \$120,000, 49%▲

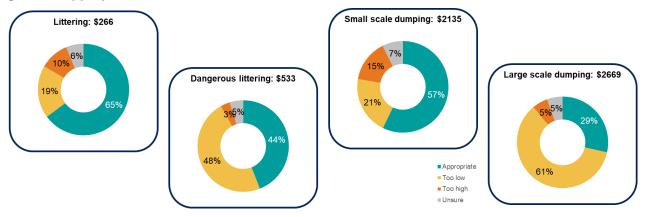
#### 3. Dangerous littering - 54%

- 4. Littering 22%
- aged 60+, 15%▼
- deliberate dumpers, 34%
- frequent litterers, 29%▲
- reported littering/illegal dumping, 32%▲
- never reported littering/illegal dumping, 21%▼
- employed full time, 27%▲
- not working, 19%▲
- household income > \$120,000, 29%▲

## 3.3.2 Appropriateness of minimum fines

Figure 18 shows how Queenslanders perceive the level of appropriateness of minimum fines for littering and illegal dumping. More than half indicate minimum fines as appropriate for littering (65%) and small-scale dumping (57%), while three in five (61%) perceive the minimum fine of \$2669 for large scale dumping as too low. When it comes to dangerous littering, almost half perceive the minimum fine as too low (48%), and there are almost as many that perceive the minimum fine as appropriate (44%).

Figure 18. Appropriateness of minimum fines



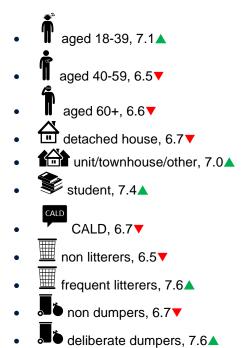
Base: All respondents, n=2000

Q28. Have a look over the minimum fines for an individual described below. Do you think these are ...?

In order to understand which sub-groups are more or less likely to believe that fines are too low or too high, each participant's score across all four of the scenarios was summed.

- 1 point was awarded for a response of 'too low' (so the minimum possible summed score is 4)
- 2 points were awarded for a response of 'appropriate' (so indicating that all four current fine values are appropriate would yield a score of 8)
- 3 points were awarded for a response of 'too high' (so indicating that all four current fine values are too high would yield a score of 12, the maximum possible value)

Significant differences observed for the appropriateness of minimum fines for littering and illegal dumping are shown below, based on summing this summed data. The mean score for the total sample is 6.8, indicating that at an overall level, Queenslanders tend to feel that fines are too low. 'Don't know' is excluded from the analysis.



## 3.4 Social

## 3.4.1 Social acceptability of illegal dumping

Figure 19 shows the level of social acceptability among Queenslanders around illegal dumping. Overall, illegal dumping actions are considered socially unacceptable with at least 78% of surveyed respondents indicating 'somewhat' or 'very unacceptable'. However, there is a more lenient perception when it comes to leaving household goods beside charity bins – 60% found it either 'somewhat' or 'very unacceptable'.

NET 84% Left their general domestic waste in a park, bushland or national park 92% Left their general domestic waste on the side of the road (not in a bin) 92% 87% Left tyres, chemical drums and paint tins in a park, bushland or national park 92% Left their household goods (e.g. appliances, TVs, toys, furniture) in a park, 86% 92% bushland or national park 92% Left tyres, chemical drums and paint tins on the side of the road 24% 58% 81% Left their green waste in a park, bushland or national park Left household goods (e.g. appliances, TVs, toys, furniture) on the side of the 12% 16% 62% 78% 19% Left household goods beside a charity bin 5 60% -100% 0% 100%

■Very Acceptable ■Somewhat acceptable ■Neither acceptable nor unacceptable ■Somewhat Unacceptable ■Very Unacceptable

Figure 19. Social acceptability of illegal dumping

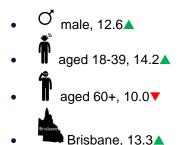
Base: All respondents, n=2000

Q10. How acceptable or unacceptable would you find another person's behaviour if they...?

In order to understand which sub-groups find illegal dumping more acceptable or unacceptable, each participant's score across all eight of the scenarios was summed.

- 1 point was awarded for a response of 'very unacceptable' (so the minimum possible summed score is 8)
- 2 points were awarded for a response of 'somewhat unacceptable' (so indicating that all eight scenarios are 'somewhat unacceptable' would yield a score of 16)
- 3 points were awarded for a response of 'neither acceptable nor unacceptable' (so indicating that all eight scenarios are 'neither acceptable nor unacceptable' would yield a score of 24)
- 4 points were awarded for a response of 'somewhat acceptable' (so indicating that all eight scenarios are 'somewhat acceptable' would yield a score of 32)
- 5 points were awarded for a response of 'very acceptable' (s so indicating that all eight scenarios are 'very acceptable' would yield a score of 40, the maximum possible value)

Significant differences observed for the acceptability of illegal dumping are shown below. The mean score for the total sample is 12.3, indicating that at an overall level, Queenslanders tend to find illegal dumping unacceptable (as the score is well below the neutral score of 24).



- South East Queensland, 11.9▼

  detached house, 11.9▼

  unit/townhouse/other, 13.2▲

  student, 14.9▲

  household income > \$120,000, 14.0▲

  CALD, 13.8▲

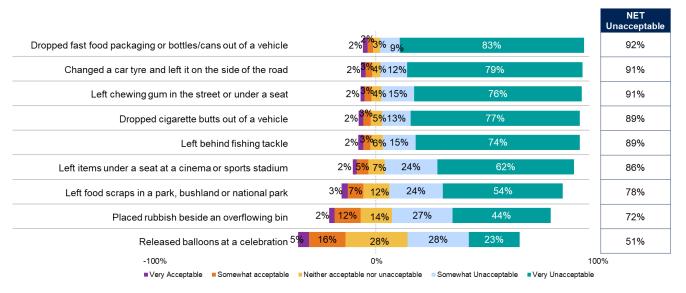
  frequent litterers, 17.9▲

  non dumpers, 11.6▼
- deliberate dumpers, 22.7▲
- reported littering/illegal dumping, 15.0▲

## 3.4.2 Social acceptability of littering

Figure 20 shows the level of social acceptability in littering. Most littering behaviours are generally not considered acceptable with at least 72% of Queensland residents indicating 'somewhat' or 'very unacceptable', but they are more tolerant towards releasing balloons during celebrative events (51%).

Figure 20. Social acceptability of littering



Base: All respondents, n=2000

Q9. How acceptable or unacceptable would you find another person's behaviour if they...?

As for acceptability of illegal dumping, each participant's score across all nine of the scenarios was summed in order to understand which sub-groups are more or less likely to indicate acceptance of littering.

- 1 point was awarded for a response of 'very unacceptable' (so the minimum possible summed score is 9)
- 2 points were awarded for a response of 'somewhat unacceptable' (so indicating that all eight scenarios are 'somewhat unacceptable' would yield a score of 18)
- 3 points were awarded for a response of 'neither acceptable nor unacceptable' (so indicating that all eight scenarios are 'neither acceptable nor unacceptable' would yield a score of 27)
- 4 points were awarded for a response of 'somewhat acceptable' (so indicating that all eight scenarios are 'somewhat acceptable' would yield a score of 36)

• 5 points were awarded for a response of 'very acceptable' (s so indicating that all eight scenarios are 'very acceptable' would yield a score of 45, the maximum possible value)

Significant differences observed for the acceptability of littering are shown below. The mean score for the total sample is 14.9, indicating that at an overall level, Queenslanders tend to find littering unacceptable.

aged 18-39, 16.4 ♣

aged 18-39, 16.4 ♣

aged 60+, 12.9 ▼

Brisbane, 15.8 ♣

South East Queensland, 14.4 ▼

detached house, 14.5 ▼

unit/townhouse/other, 15.9 ♠

student, 17.0 ♠

household income > \$120,000, 17.1 ♠

CALD, 16.1 ♠

frequent litterers, 20.9 ♠

non dumpers, 14.3 ▼

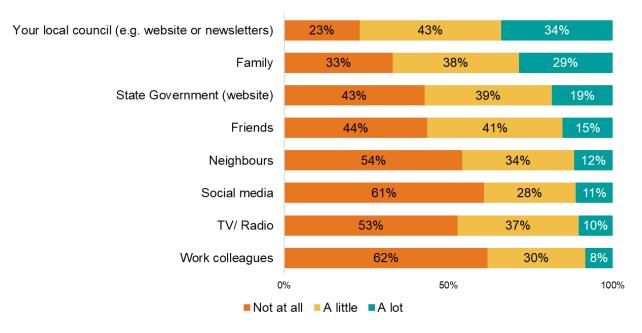
deliberate dumpers, 25.1 ♠

reported littering/illegal dumping, 17.8

## 3.4.3 Social influences

Figure 21 shows the influence social reference groups when disposing bulky waste. Local councils (34%) and family members (29%) are the two most influential in bulky waste disposal decisions.

Figure 21. Social influences on disposal of bulky waste



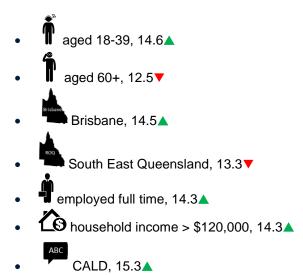
Base: All respondents, n=2000

Q11. Which of the following influence your decisions on how you dispose of bulky waste?

Each participant's score across all eight of the social influences was summed are shown below, which will help to understand which sub-groups are more or less likely to be influenced by others by others.

- 1 point was awarded for a response of 'not at all' (so the minimum possible summed score is 8)
- 2 points were awarded for a response of 'a little' (so indicating that all eight reference groups 'a little' influence would yield a score of 16)
- 3 points were awarded for a response of 'a lot' (so indicating that all eight reference groups 'a lot' influence would yield a score of 24, the maximum possible value)

Significant differences observed for those more influenced by others are shown below, based on summing this summed data. The mean score for the total sample is 13.7, indicating that at an overall level, Queenslanders tend to indicate low levels of social influence when it comes to bulky waste disposal.



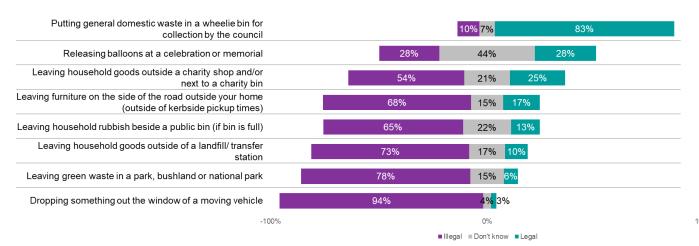
- frequent litterers, 15.8
- non dumpers, 13.4▼
- deliberate dumpers, 16.7▲
- reported littering/illegal dumping, 14.9▲

## 3.5 Ability

## 3.5.1 Perception of legality

Figure 22 shows the perception of legality in disposing waste among Queensland residents. Most Queenslanders have correct perceptions around legal acts when it comes to waste disposal. The major exception is releasing balloons during celebration events or memorials – equal proportions of residents perceive it as legal and illegal (28%). More than two in five (44%) indicated they did not know.

Figure 22. Legality of waste disposal



Base: All respondents, n=2000

Q21. Some methods of waste disposal are legal, and others are not legal. Please indicate whether you think the following are legal or illegal.

Selected significant differences observed for the perception of legality of each action are shown below. See Section 5.4 in the appendix for a full list of significant differences.

#### 1. 'Putting general domestic waste in a wheelie bin for collection by the council'

a. Illegal - 10%

- ¶ aged 18-39, 13%▲
   aged 60+, 6%▼
- ■ non dumpers, 9%▼
- deliberate dumpers, 33% •
- non litterers and food scraps litterers, 8% and 2%▼

- frequent litterers, 19%
- detached house, 9%▼
- unit/townhouse/other, 13%▲
- employed full time, 13%▲
  - CALD, 17%▲
- non-CALD, 9%▼
- 2. 'Releasing balloons at a celebration or memorial'
  - a. Legal 28%
- deliberate dumpers, 47%▲
- mon litterers, 25%▼
- frequent litterers, 39%▲
- reported littering/illegal dumping, 40%▲
- never reported littering/illegal dumping, 27%▼
- employed full time, 33%▲
- household income > \$120,000, 35%▲
  - b. Don't know 44%
- ¶ aged 18-39, 39%▼
- ¶ aged 60+, 50%▲
- non dumpers, 45% ▲
- deliberate dumpers, 17%▼
- frequent litterers, 35%▲
- reported littering/illegal dumping, 29%▼
- never reported littering/illegal dumping, 46%▲
- household income > \$120,000, 35%▼
- 3. 'Leaving household goods outside a charity shop and/or next to a charity bin'
  - a. Legal 25%

- **p** aged 18-39, 33%▲
- **1** aged 60+, 16%▼
- ■ non dumpers, 23%▼
- kerbside dumpers and deliberate dumpers, 34% and 46%▲
- non litterers, 20%▼
- ☐ frequent litterers, 38%▲
- reported littering/illegal dumping, 32%
- ¶ employed part time, 31%▲
- not working, 20%▼
- non-CALD, 25%▼
- CALD, 35%▲
  - b. Don't know 21%
- reported littering/illegal dumping, 14%▼
- 4. Leaving furniture on the side of the road outside your home (outside of kerbside pickup times)
  - a. Legal 17%
- ¶ aged 18-39, 23%▲
- aged 60+, 10%▼
- non dumpers, 15%▼
- deliberate dumpers, 46%▲
- non litterers, 11%▼
- frequent litterers, 33%
- reported littering/illegal dumping, 25%
- never reported littering/illegal dumping, 16%▼
- mployed full time, 20%▲
- not working, 12%▼
- non-CALD, 16%▼



## 5. 'Leaving household rubbish beside a public bin (if bin is full)'

#### a. Legal - 13%

- aged 18-39, 17%▲
- **1** aged 60+, 8%▼
- ■ non dumpers, 11%▼
- deliberate dumpers, 41%▲
- non litterers, 7%▼
- frequent litterers, 28%▲
- reported littering/illegal dumping, 25%▲
- never reported littering/illegal dumping, 12%▼
- degree+, 18%▲
- mployed full time, 17%▲
- not working, 9%▼

#### b. Don't know - 22%

- . O male, 19%▼
- ¶ aged 18-39, 26%▲
- non dumpers, 23%▲
- reported littering/illegal dumping, 12%▼
- never reported littering/illegal dumping, 24%▲

#### 6. Leaving household goods outside of a landfill/ transfer station

- a. Legal 10%
- ¶ aged 18-39, 14%▲

- ■ non dumpers, 8%▼
- deliberate dumpers, 42%▲
- non litterers, 6%▼
- reported littering/illegal dumping, 22%▲
- never reported littering/illegal dumping, 9%▼
- detached house, 9%▼
- unit/townhouse/other, 14%▲
- degree+, 13%▲
- employed full time, 14%▲
- not working, 8%▼
- Los household income > \$120,000, 16%▲
- ABC non-CALD, 10%▼
- CALD, 15%▲

#### 7. Leaving green waste in a park, bushland or national park

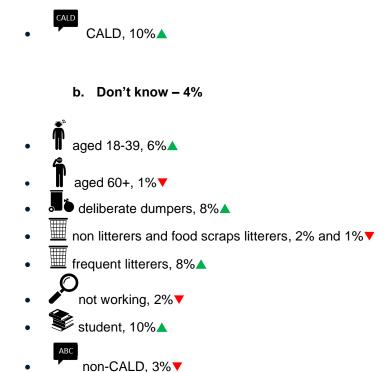
a. Legal - 6%

- ¶ aged 18-39, 10%▲
- aged 60+, 2%▼
- Brisbane, 9%▲
- non dumpers, 5%▼
- deliberate dumpers, 27%▲
- non litterers, 2%▼
- frequent litterers, 20%
- reported littering/illegal dumping, 17%▲
- never reported littering/illegal dumping, 5%▼
- detached house, 5%▼
- unit/townhouse/other, 10%▲

- Vear 12 or less, 4%▼
- certificate/trade/diploma, 5%▼
- degree+, 10%▲
- employed full time, 10%
- not working, 3%▼
- household income > \$120,000, 10%▲
- non-CALD, 6%▼
- CALD, 10%▲

#### 8. Dropping something out the window of a moving vehicle

- a. Legal 3%
- O male, 4%▲
- ♀ female, 1%▼
- ¶ aged 18-39, 4%▲
- ¶ aged 60+, 0%▼
- ■ non dumpers, 1%▼
- deliberate dumpers, 24%▲
- ■ non litterers, food scraps litterers and occasional litterers, 0%, 0% and 1%▼
- frequent litterers, 12%
- reported littering/illegal dumping, 10%▲
- never reported littering/illegal dumping, 2%▼
- detached house, 2%▼
- unit/townhouse/other, 4%▲
- degree+, 4%▲
- ¶ employed full time, 4%▲
- not working, 1%▼
- Lo household income > \$120,000, 6%▲
- non-CALD, 6%▼



## 3.5.2 Knowledge in reporting and fines

Figure 23 shows the different organisations that Queenslanders can report to in relation to littering and illegal dumping. Most indicated they would report littering (66%) and illegal dumping (71%) to local council. Queensland Police Service is the second on the list when it comes to reporting littering (28%) and illegal dumping (32%).

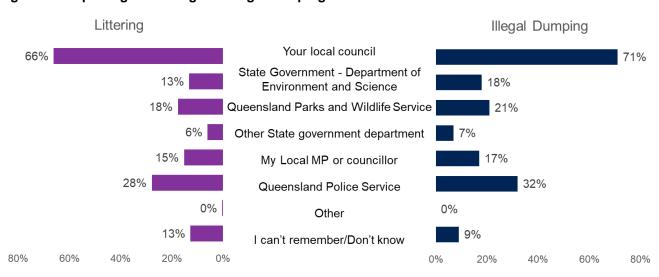


Figure 23. Reporting of littering and illegal dumping

Base: All respondents, n=2000

Q22. To which, if any, of the following organisations would you report littering and illegal dumping?

Significant differences in reporting to QLD DES are shown below.

#### 1. 'Littering' - 13%

male, 16% ↓

female, 10% ▼

female, 10% ▼

non dumpers, 12% ▼

deliberate dumpers, 26% ↓

non-litterers and food scraps litters, 11% and 7% ▼

frequent litterers, 22% ↓

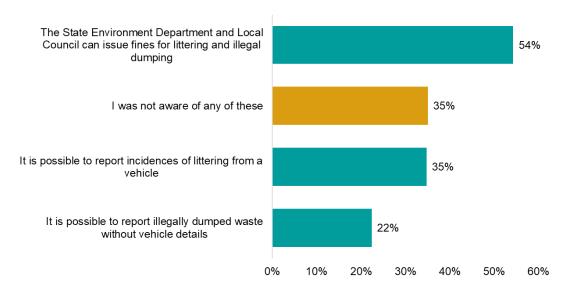
reported littering/illegal dumping, 25% ↓

never reported littering/illegal dumping, 12%▼

- 2. 'Illegal dumping' 18%
- O male, 21%▲
- reported littering/illegal dumping, 29%▲
- never reported littering/illegal dumping, 17%▼

Figure 24 shows Queenslanders' level of knowledge in relation to reporting illegal dumping and littering. More than half (54%) were aware that the State Environment Department and local council can issue fines for littering and illegal dumping. More than one in three (35%) were aware that it is possible to report littering incidences from a vehicle but there are as many that were not aware of any of those (35%).

Figure 24. Knowledge in relation to reporting of illegal dumping and/or littering



Base: All respondents, n=2000

Q29. Before starting this survey which of the following were you aware of?

Significant differences for those that were not aware any of illegal dumping and littering reporting – 35%:

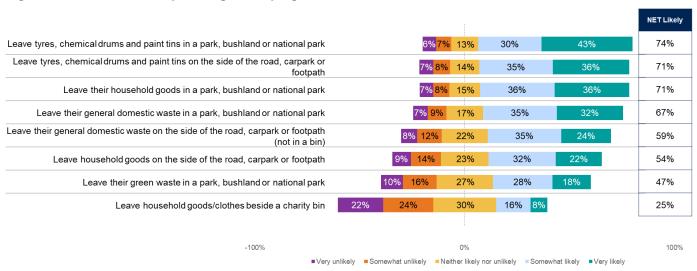
female, 40% ▲
male, 30% ▼
aged 18-39, 40% ▲
aged 60+, 29% ▼

## 3.6 Reporting

## 3.6.1 Likelihood to report illegal dumping

Figure 25 shows how likely Queensland residents are to report different illegal dumping behaviours. Queenslanders are more likely (i.e. somewhat or very likely) to report tyres, chemical drums and paint tins, illegal dumping behaviours, either in park, bushland or national park (74%) or on the side of the road, carpark or footpath (71%). On the other hand, the likelihood of reporting leaving household goods beside a charity bin decreases to one in four (25%), similar to social acceptability of illegal dumping.

Figure 25. Likelihood to report illegal dumping behaviours



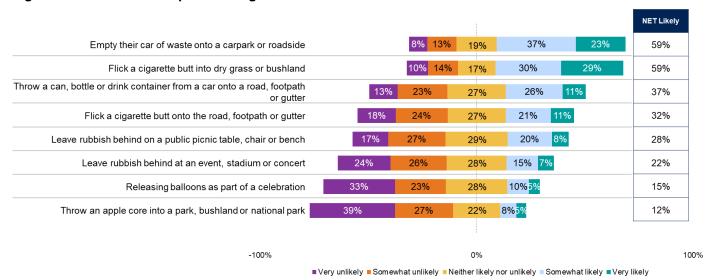
Base: All respondents, n=2000

Q24. And now thinking about waste larger than a wheelie bin load, how likely would you be to report someone if you saw them doing the following?

## 3.6.2 Likelihood to report littering

Figure 26 shows the likelihood in reporting littering behaviours in Queensland. Littering behaviours such as emptying waste from car onto carpark or roadside (59%) and flicking cigarette butts into dry grass or bushland (59%) are most likely to be reported. Likelihood of reporting decreases significantly when it comes to releasing balloons as part of a celebration (15%) and throwing an apple core into a park, bushland or national park (12%).

Figure 26. Likelihood to report littering behaviours



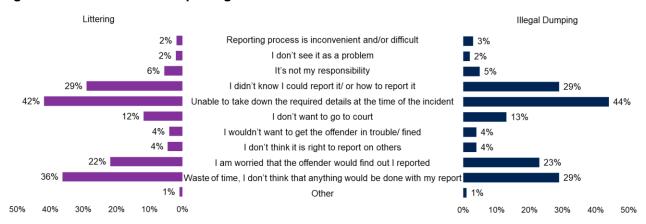
Base: All respondents, n=2000

Q23. How likely would you be to report someone if you saw them doing the following?

## 3.6.3 Barriers to reporting the problem

Figure 27 shows the reasons why Queenslanders would not report a littering or illegal dumping act. The most cited reason was the inability to take down the required details when littering (42%) or illegal dumping (44%) happened. This is followed by people thinking reporting is a waste of time (littering 36%, dumping 29%) and being unaware they could report (littering 29%, dumping 29%). Interestingly, more than one in five are worried that they would be found out by the offender when reporting littering (22%) or illegal dumping (23%).

Figure 27. Reasons for not reporting



Base: All respondents, n=2000

Q26. What are the main reasons, if any, that you would not report a littering or illegal dumping act? Please select up to three each for littering and illegal dumping.

Significant differences observed for those that didn't know they could report or how to report:

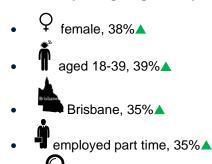
#### 1. For reporting littering - 29%

• ♀ female, 38%▲

• ¶ aged 18-39, 38%▲



#### 2. For reporting illegal dumping - 29%



not working, 25%▼

■ occasional litterers, 34%▲

# 4 Segmentation analysis

Segmentation analyses are a means of partitioning markets into groups of people with similar needs, characteristics and/or behaviours and perceptions who are likely to exhibit similar outcome behaviours. Segmentations provide guidelines for an organisation's marketing strategy, policy development and resource allocation among target audiences.

The key criteria for a relevant segmentation include:

- Exist. The segment must represent a real situation that exists in the market, not a data-only situation
- Distinctive: Sufficiently different on the relevant variables
- Targetable: Can be reached by a market intervention
- Profitable: Segments need to be big and valuable enough to go after
- Respond: Segments should respond differently to a different marketing mix
- Stable: Present an on-going situation which lasts for enough time to make communicating with each segment a valuable proposition.

## 4.1 Approach

The segmentation approach taken was a **Latent Class Analysis**, which considers a range of variables to find the most appropriate and useful segments for targeting littering and illegal dumping behaviours.

After the completion of quantitative data collection, the segmentation analysis was conducted using the following approach:

- Data exploration
  - Statistical analysis to explore the associations and relationships (positive or inverse) between behaviours, attitudes, motivations, barriers and propensity to change.
  - Correlations and crosstabs.
- 2. Factor analysis

- Data reduction technique which is useful when applied to many attributes (in this case attitudes and behaviours) to arrive at a smaller set of explanatory variables.
- This removes the interdependency between variables and aids in working with a smaller number of independent factors, which describe the underlying variability.
- Allows for a more streamlined set of variables to feed into the segmentation that are easier to work with.

#### 3. Clustering algorithms

- Clustering to calculate the segments.
- Latent class analysis (probabilistic).

#### 4. Segment profiling

- Extensive profiling of segments to ensure meaningful differences, key defining drivers of segments and comparison of solutions in conjunction with DES.
- Each segment is profiled demographically using standard inferential statistics to determine the characteristics of participants in the segments and establish which demographic groups are overrepresented segments.

## 4.2 Output Summary

A **Principle Components Analysis** was conducted to reduce the variables and determine whether any questions could be combined for the segmentation analysis.

- Variables were converted into numerical data and normalised for analysis (as required).
- 'Don't knows' were treated as missing data (the model used partial data as required).
- The Kaiser rule was used for selecting components.
- The rotation method was Varimax.

The output components were used to determine which variables were producing similar (non-orthogonal) groups within the population, and the components that explained the most variance in the data were used in the segmentation analysis. Questions that were combined (see below) summed the average numerical scores across statements.

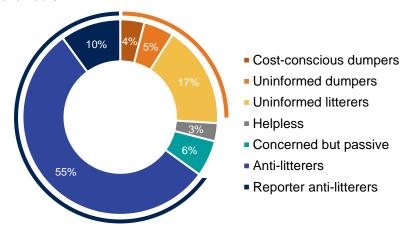
#### Segmentation

The weighted questionnaire data was input to into the Latent Class Analysis (n=2000), using the following inputs to drive the segmentation:

- Personal impact on environmental (Q8)
- How acceptable are others' behaviours (Q9 & Q10)
- Influence of others (Q11)
- Impact of waste on environment (Q13)
- Visual or social impact of littering and dumping (Q14 & Q15)
- Chances of getting caught / fined (Q14 & Q15)
- Perception of getting fined (Q16 & Q17)
- Likelihood of reporting someone else (Q23 & Q24)

## 4.2.1 Segment profile summaries

Seven distinct segments were identified in the Queensland community in relation to littering and dumping behaviours.



Of the seven segments identified, two hold anti-littering attitudes and cover two-thirds of Queenslanders: *Anti-litterers* and *Reporter anti-litters*.

Three segments at the opposite end of the spectrum cover the proportion of Queenslanders with poor waste disposal behaviours: *Cost-conscious dumpers, Uninformed dumpers, and uninformed litterers.* 

The two remaining segments (*Helpless* and *Concerned but passive*) fall in-between with a more varied range of behaviours and attitudes.

The outlines below provide an overview of the profile of each segment. A more detailed profile of each is provided in Section 5.1, and statistical table showing differences between the segments in detail is provided in Section 5.3.

#### Cost-conscious dumpers (4%)

Of all the segments, *Cost-conscious dumpers* includes the largest proportion of Queenslanders who illegally dump waste (57% of people in the segment). Four-fifths (82%) admit to frequent littering. Surprisingly, they are also the segment most likely to have reported dumping and littering in the past (56%), and to say they will report these behaviours in the future.

People in this segment tend to feel that the cost of waste disposal is too high, which is likely to be driving their dumping behaviour. Despite undertaking both dumping and littering, they think that it is likely that they will be caught and fined for littering or dumping. However, they appear to have poor understanding of the legality of littering and dumping behaviours.



Who to target: The Cost-conscious dumpers segment is primarily males between 18 and 59 years of age. They are more likely to live in Brisbane than other segments and tend to be well educated, high earners and employed full-time.

#### How to target:

**Motivation:** Increasing the awareness of fines and perceptions of the likelihood of being caught matches with this segment's motivations to reduce littering and dumping behaviours. **Motivation:** More research may be required to understand the influence of cost on this audience.

**Social:** There is also scope to highlight acceptable behaviour/social norms, and increasing the segment's knowledge of which disposal behaviour are illegal.

#### **Uninformed dumpers (5%)**

Uninformed dumpers as a segment has the second largest proportion of Queenslanders who illegally dump (38% of the segment) and a high proportion of frequent litterers (59%). Unlike the *Cost-conscious dumpers*, few in this segment have reported illegal dumping or littering in the past (11% of segment). They also say that they are unlikely to report others in the future.

People in this segment are influenced by others, but don't hold themselves as responsible for the issues of littering and dumping. They feel that waste has a low impact on the environment, and they have a low knowledge of legality around waste disposal.



Who to target: This segment is strongly represented among younger people (aged 18-39). In line with this, they are less likely to live in detached houses than others in the population.

#### How to target:

**Ability/Motivation:** This segment is most likely to change behaviours by increasing their knowledge around littering and dumping. This includes their understanding of which disposal methods are illegal, how to report littering and dumping behaviours, and the negative impacts of littering and dumping on the environment.

**Social:** Increasing the influence of social norm may also change their behaviour.

#### **Uninformed litterers (17%)**

*Uninformed litterers* are the most likely to be casual litterers (39% of segment litter occasionally) but are close to the population average for dumping (88% of segment non-dumpers). They are the least likely to have reported someone for littering or dumping of any segment (6%).

People in this segment also stand out with their low levels of awareness that they can report littering or dumping, and poor knowledge of who to report to. They have average levels of knowledge of the legality of waste disposal options. They feel that littering and dumping have a low impact on the environment, and that it is unlikely they will be fined for littering.



Who to target: This segment is strongly represented among employed men.

#### How to target:

**Ability/Motivation:** As with *Uninformed dumpers*, behaviour change for *Uninformed litterers* may be assisted by increasing their knowledge. This includes their understanding of which disposal methods are illegal, how to report littering and dumping behaviours, and the negative impacts of littering and dumping on the environment.

**Motivation:** Their littering behaviours may also change if they if they are made more aware of the likelihood of being caught and fined.

#### Helpless (3%)

The *Helpless* segment encompasses a range of littering and dumping behaviours. Overall, people in the segment close to the population average for dumping and littering behaviour. They display an average history of reporting littering and dumping acts.

People in this group have low motivation to avoid littering and dumping and find it difficult to take waste to their nearest disposal location. They feel they have little influence on environmental issues, despite an level of average concern over the impact that waste has on the environment and are mostly concerned by superficial aspects of littering such as the visual aesthetics.



Who to target: The demographic mix of this segment does not differ from that of the overall Queensland population.

<u>How to target:</u> This segment comprises only a small portion of the audience, and their lack of motivation and wide range of behaviours makes it a harder and less useful segment to target.

#### Concerned but passive (6%)

The *Concerned but passive* segment is split evenly between those who do and don't litter (51% of segment non-litterers) with almost four fifths non-dumpers (87% of segment). They have an average history and future likelihood of reporting littering and dumping acts.

People in this segment have a good understanding of the legality of waste disposal options, believe dumping and littering have high impacts on the environment, and find others' littering and dumping behaviours unacceptable. However, they feel they are unlikely to be fined for littering and dumping behaviours, they aren't highly influenced by others, and are not motivated by fines, costs, social burdens of the negative waste behaviours or aesthetics.



Who to target: The demographic mix of this segment does not differ from that of the overall Queensland population.

How to target:

Motivation: Build perceptions of the likelihood of being caught.

#### Anti-litterers (55%)

The *Anti-litterer* segment makes up the largest segment in the Queensland population (55%). The majority say that they do not undertake any littering behaviours (55% of the segment) or if they do, only litter food-scraps (12%). The vast majority do not dump waste illegally (90%). Only a small portion have reported littering or dumping in the past (9% of segment). They are more likely than others to report someone in the future for illegal dumping than for littering.

They find others' littering and dumping behaviours unacceptable and are less likely to be influenced by others. The biggest influences on their behaviours are the social and visual impacts of littering and dumping. They also believe their own behaviours impact the environment. However, they believe it is unlikely they would be caught and fined for littering or dumping.



Who to target: This segment is older (32% 60+ years), slightly more female (56%), are much more likely to live in a house (72%) and less likely to have full-time work (32%) than other segments.

#### How to target:

**Motivation:** People in this segment are already socially conscious and providing messaging around the broad impacts of littering may not have a great influence on their behaviours. They may, however, be influenced by novel messaging around the impacts specific types of littering or dumping (e.g. littering of compostable items). Increasing their perceptions of the likelihood of being fined may improve their littering their behaviours further.

**Ability/Motivation:** Further research to understand how they can be mobilised as reporters may be valuable. Increasing their knowledge of avenues for reporting and the ease of doing so may be a good start.

#### Reporter anti-litterers (10%)

The Reporter anti-litterers are the least likely of any segment to litter (62% of segment are non-litterers), with a majority not dumping waste illegally (84%). They are the second most likely after Cost-conscious dumpers to have reported someone in the past (19%) and are more likely to do so in the future as well.

People in this segment see a range of reasons not to litter or dump, with the highest rating being the social burden, aesthetics and being caught or fined. They find other people's littering and dumping behaviour highly unacceptable and are socially influenced by others. They have a high belief in their personal impact on the environment, and a high perceived chance of getting fined.



Who to target: This segment has a larger portion of Queenslanders outside of SEQ (ROQ) than other segments. They are less likely to be high earners or highly educated, and the majority are students or not working.

#### How to target:

**Ability/Motivation:** People in this segment are already receptive to environmental and socially-conscious appeals and feel that the chances of being caught and fined are high. **Motivation/Social:** While many are likely to report in the future, there is still a large proportion who indicate that they are unlikely to do so. Mobilising this nascent audience as reporters may be beneficial if this this fits behavioural objectives.

# **5 Appendix**

## **5.1 Segment profiling questions**

The following topics were used when profiling each of the seven segments to determine key motivators and barriers, along with demographic details.

	PPS / MAIN	TOPIC	QUESTION					
Beh	aviour	Littering	Q3. Please indicate how often you have thrown away any of the following items in public places without placing them in the bin? Q4. Which of the following have you done in the past 12 months?					
		Dumping	Q2. And still thinking only about amounts larger than a wheelie bin load, how have you disposed of each of these things in the last 12 months?					
		Reporting	Q25. Have you ever reported a littering or illegal dumping act?					
Mot	ivation	Motivations for not littering / dumping	Q14. For items smaller than a wheelie bin load, please indicate how much you agree or disagree with each of the following statements.  Q15. Now for items larger than a wheelie bin load, please indicate how much you agree or disagree with each of the following statements.					
	Environment (motivation)	Impact of waste on environment	Q13. Thinking about the impacts of waste items on the environment, to what extent are you concerned with the following issues?					
		Personal impact on environmental	Q8. To what extent do you personally agree or disagree with each of the statements below?					
	Reporting and fines (motivation)	Likelihood of reporting someone else	Q23. How likely would you be to report someone if you saw them doing the following?  Q24. And now thinking about waste larger than a wheelie bin load, how likely would you be to report someone if you saw them doing the following?					
		Barriers to reporting	Q26. What are the main reasons, if any, that you would not report a littering or illegal dumping act?					
		Perception of responsibility	Q20. Who do you think is most responsible for addressing the issues of littering and illegal dumping?					
		Perception of likelihood to be caught and fined	Q16. Thinking about small items, how likely do you think it is that you would be caught and fined in the following situations?  Q17. Thinking about items larger than a wheelie bin, how likely do you think it is that you would be caught and fined if you were leaving waste in the following locations?					
Abi	lity	Knowledge of how to report	Q22. To which, if any, of the following organisations would you report littering and illegal dumping?					
		Knowledge of legality	Q21. Some methods of waste disposal are legal, and others are not legal. Please indicate whether you think the following are legal or illegal.					
Phy	sical Context	Access to a car or trailer	Q34. Does anyone in your household own or have access to:					
		Ease of waste disposal	Q6. how easy or difficult would you say it is for you to take waste to your nearest landfill, rubbish tip or transfer station?					
Soc	ial	How acceptable are others' behaviours	Q9. How acceptable or unacceptable would you find another person's behaviour if they? Q10. How acceptable or unacceptable would you find another person's behaviour if they?					
		Influence of others	Q11. Which of the following influence your decisions on how you dispose of bulky waste?					

## 5.2 Segments

## 5.2.1 COST-CONSCIOUS DUMPERS (SEGMENT SIZE 4%)



- Non litterer
- Food-scraps litterer
- Occasional litterer
- Frequent litterer
- - Non dumper
  - Kerbside dumper
  - Deliberate dumper

#### Key drivers of littering Key barriers to and dumping reporting

Cost of disposal Low knowledge of legality

Being caught and fined

Social influence

49% Unable to take down details

46%↑ Worried that offender would find out

36%↑ Wouldn't want to get the offender in trouble

#### **Demographics**

**76%**↑ Male

4%↓ 60+ years

41%↑ Brisbane

59%↑ \$120+ income

77%↑ Employed full-time

#### Behaviours, motivations and perceptions

#### **Behaviours**

- Frequent litterers
- Majority have illegal dumped waste
- More likely to have reported others for littering and dumping

#### **Motivation**

- Most motivated by the cost of legal waste disposal methods
- Report being more motivated than others by the chances of getting caught or fined

#### **Environment**

High concern about the impact of waste on the environment

#### Reporting and fines

- More likely to report others for littering and dumping in the future
- Barriers to reporting: More likely to worry about the offender finding out, not want to get the offender in trouble, and not see the acts as a problem
- Less likely to hold local Councils as responsible for addressing issues of littering and illegal dumping
- Believe their chances of getting fined are high

#### **Ability**

- Lowest knowledge of legality
- More likely than others to report to State Government departments including DES, QPWS, and their local MP or councillor, and less likely to report to local council

#### **Physical context**

Highest access to a trailer for transporting waste

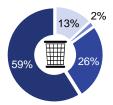
#### Social

- More likely to perceive others' littering and illegal dumping behaviour as acceptable, influenced by others
- More likely to empathise with other litterers or dumpers

	Male	Female	18-39	40-59	60+	Bris.	SEQ	ROQ	House	Unit / other
Cost-conscious dumpers	76%↑	24%↓	48%	48%	4%↓	41%↑	24%↓	36%	51%↓	49%↑
TOTAL	49%	51%	38%	35%	27%	25%	45%	30%	70%	30%
		Trade /				Not w	orking			

	<= Year 12	Trade / diploma	Degree+	Full-time	Part-time	Not working / student	< \$40k	\$40k - \$120k	\$120k+
Cost-conscious dumpers	10%↓	17% ↓	73% ↑	77%↑	10%	11%↓	6%↓	33%↓	59%↑
TOTAL	31%	36%	33%	36%	18%	42%	22%	47%	21%

## 5.2.2 UNINFORMED DUMPER (SEGMENT SIZE 5%)



- Non litterer
- Food-scraps litterer
- Occasional litterer
- Frequent litterer
- - Non dumper
- Kerbside dumper
- Deliberate dumper

#### Key drivers of littering Key barriers to and dumping reporting

Social influence Low knowledge of legality Feel waste has a low impact on the environment report Don't hold themselves

responsible

Choose fewer barriers than other segments. 34% Unaware they can

28%↓ Waste of time 26%↑ Don't think it's right to report on others

#### **Demographics**

72%↑ 18-39 years 42%↑ Unit/other 27% Not working

### Behaviours, motivations and perceptions

### **Behaviours**

- Frequent litterers
- Many have illegal dumped waste

#### **Motivation**

- Low overall motivation
- More likely to report being motivated by cost of waste disposal

#### **Environment**

- Low concern about the impact of waste on the environment
- Low belief in personal impact on the environment

#### Reporting and fines

- Unlikely to report others for littering and dumping in the future
- Barriers to reporting: More likely to think it is wrong reporting on others, not see it as their responsibility, not want to get the offender in trouble and not see the acts as a problem
- Less likely to perceive local councils as responsible for addressing the issue of littering and dumping
- Least likely of all segments to hold themselves as responsible
- Believe their chances of getting fined are high

#### **Ability**

- Low knowledge of legality
- More likely than others to report to State Government departments, and less likely to report to local council

#### **Physical context**

- Lowest access to a car
- Less likely to say it is 'easy' for them to take waste to a tip

#### Social

- More likely to perceive others' littering and illegal dumping behaviour as acceptable
- More influenced by others

	Male	Female	18-39	40-59	60+	Bris.	SEQ	ROQ	House	Unit / other
Uninformed dumpers	61%	39%	72% ↑	21%↓	7% ↓	31%	46%	23%	58% ↓	42% ↑
TOTAL	49%	51%	38%	35%	27%	25%	45%	30%	70%	30%

	<= Year 12	Trade / diploma	Degree+	Full-time	Part-time	Not working	< \$40k	\$40k - \$120k	\$120k+
Uninformed dumpers	28%	37%	30%	44%	14%	27% ↓	21%	43%	22%
TOTAL	31%	36%	33%	36%	18%	42%	22%	47%	21%

## 5.2.3 UNINFORMED LITTERER (SEGMENT SIZE 17%)



- Non litterer
- Food-scraps litterer
- Occasional litterer
- Frequent litterer
- 8%4%
- Non dumper
- Kerbside dumper
- Deliberate dumper

## Key drivers of littering and dumping

Low perceived chance of getting fined

Feel waste has a low impact on the environment

Low knowledge of who to report to

Least likely to report others

## Key barriers to Demo reporting

42% Waste of time 57%↑ Male

41%↓ Unable to take down details

36% Unaware they can report

**Demographics** 

33%↓ Not working

#### Behaviours, motivations and perceptions

#### **Behaviours**

- Occasional litterers
- Most do not illegally dump waste
- Least likely to have reported in the past

#### **Motivation**

Low overall motivation

#### Environment

- Low concern about the impact of waste on the environment
- Low belief in personal impact on the environment

#### Reporting and fines

- Unlikely to report others for littering and dumping in the future
- Barriers to reporting: More likely to not see it as their responsibility
- Less likely to perceive environmental groups or State Government as responsible for addressing the issue of littering and dumping
- · Believe their chances of getting fined are low

#### Ability

- Average knowledge of legality
- Less likely than others to report to State Government departments including DES, QPWS, QLD Police Service, and their local MP or councillor

#### **Physical**

Less likely to say it is 'easy' for them to take waste to a tip

#### Social

- More likely to perceive others' littering and illegal dumping behaviour as acceptable
- · The least influenced by others

	Male	Female	18-39	40-59	60+	Bris.	SEQ	ROQ	House	Unit / other
Uninformed litterers	57% ↑	43% ↓	43%	35%	22%	25%	48%	27%	68%	32%
TOTAL	49%	51%	38%	35%	27%	25%	45%	30%	70%	30%

	<= Year 12	Trade / diploma	Degree+	Full-time	Part-time	Not working	< \$40k	\$40k - \$120k	\$120k+
Uninformed litterers	29%	34%	35%	41%	18%	33% ↓	20%	48%	22%
TOTAL	31%	36%	33%	36%	18%	42%	22%	47%	21%

## 5.2.4 HELPLESS (SEGMENT SIZE 3%)



- Non litterer
- Food-scraps litterer
- Occasional litterer
- Frequent litterer
- - Non dumper
- Kerbside dumper
- Deliberate dumper

#### Key drivers of littering and dumping

Find it difficult to take waste 59% Unable to take to the nearest tip

Low locus of control on environmental issues

Concerned about aesthetics of dumping

#### Key barriers to reporting

down details

51% Waste of time

29% Worried the offender would find out

#### Behaviours, motivations and perceptions

#### **Behaviours**

- Average litterers

#### Motivation

Most motivated by visual aesthetics

#### **Environment**

Low belief in personal impact on the environment

#### Reporting and fines

- Average likelihood of reporting someone else
- Barriers to reporting: Unable to take down the required details and believing it is a waste of time and not their responsibility

#### **Ability**

- Average knowledge of legality
- Most likely to report to local council

#### **Physical**

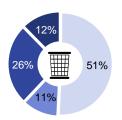
Most likely to say it is 'difficult' for them to take waste to a tip

Less likely to perceive others' littering and illegal dumping behaviour as acceptable

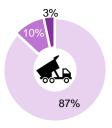
	Male	Female	18-39	40-59	60+	Bris.	SEQ	ROQ	House	Unit / other
Helpless	49%	51%	37%	41%	23%	33%	44%	23%	61%	39%
TOTAL	49%	51%	38%	35%	27%	25%	45%	30%	70%	30%

	<= Year 12	Trade / diploma	Degree+	Full-time	Part-time	Not working / student	< \$40k	\$40k - \$120k	\$120k+
Helpless	23%	35%	41%	40%	21%	38%	13%	61%	20%
TOTAL	31%	36%	33%	36%	18%	42%	22%	47%	21%

## 5.2.5 CONCERNED BUT PASSIVE (SEGMENT SIZE 6%)



- Non litterer
- Food-scraps litterer
- Occasional litterer
- Frequent litterer



- Non dumper
- Kerbside dumper
- Deliberate dumper

## Key drivers of littering and dumping

Feel fines are unlikely

Impact of waste on environment

Not influenced by others

Good understanding of legality

Low perceived chance of getting fined

# Key barriers to reporting

50% Unable to take down details

35% Waste of time

oo /o vvaoto or timo

34% Unaware they can report

#### Behaviours, motivations and perceptions

#### **Behaviours**

Average litterers and dumpers

#### **Motivation**

Lowest overall motivation of all segments

#### **Environment**

- High concern about the impact of waste on the environment
- High belief in personal impact on the environment

#### Reporting and fines

- Average likelihood of reporting someone else
- Fewer reasons given for not reporting than on average
- Believe their chances of getting fined are low

#### Ability

· Highest knowledge of legality

#### **Physical**

Average access to waste disposal facilities and cars / trailers

#### **Social**

- Less likely to perceive others' littering and illegal dumping behaviour as acceptable
- Less influenced by others

	Male	Female	18-39	40-59	60+	Bris.	SEQ	ROQ	House	Unit / other
Concerned but passive	48%	52%	40%	33%	27%	25%	42%	33%	72%	28%
TOTAL	49%	51%	38%	35%	27%	25%	45%	30%	70%	30%

	<= Year 12	Trade / diploma	Degree+	Full-time	Part-time	Not working / student	< \$40k	\$40k - \$120k	\$120k+
Concerned but passive	26%	43%	30%	37%	17%	42%	22%	44%	16%
TOTAL	31%	36%	33%	36%	18%	42%	22%	47%	21%

### 5.2.6 ANTI-LITTERER (SEGMENT SIZE 55%)



- Non litterer
- Food-scraps litterer
- Occasional litterer
- Frequent litterer
- 90%
  - Non dumper
  - Kerbside dumper
  - Deliberate dumper

### Key drivers of Key barriers to littering and dumping reporting

Visual and social 56%↑ Unable to take aesthetics down details

Impact on environment 44%↑ Waste of time

Low perceived chance of getting fined 38%↑ Unaware they can getting fined report

38%↑ Unaware they can report 72%↑ Full-time

**Demographics** 

56%↑ Female

32%↑ 60+ years

#### Behaviours, motivations and perceptions

#### **Behaviours**

- Majority do not litter, although some dispose of food scraps improperly
- Least likely to dump illegally
- · Less likely to have reported in the past

#### **Motivation**

- Highly motivated by visual and social aspects of waste disposal
- · Highly motivated by being caught and fined
- Less motivated by the cost of waste disposal

#### **Environment**

- High concern about the impact of waste on the environment
- High belief in personal impact on the environment

#### Reporting and fines

- More likely to report people for illegal dumping than for littering
- Barriers to reporting: More likely to say they were unable to take down the required details, believe it is a waste of time, and/or not know they would report these acts
- More likely to perceive local councils and State Government as responsible for addressing the issue of littering and dumping
- Believe their chances of getting fined are low

#### **Ability**

- High knowledge of legality
- More likely to report to local council and QPWS, and less likely to report to other state departments

#### **Physical**

- Highest access to a car
- More likely to say it is 'easy' for them to take waste to a tip

#### Social

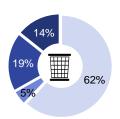
- Less likely to perceive others' littering and illegal dumping behaviour as acceptable
- · Less influenced by others

#### **Demographics**

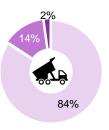
	Male	Female	18-39	40-59	60+	Bris.	SEQ	ROQ	House	Unit / other
Anti-litterer	44%↓	56% ↑	33% ↓	35%	32% ↑	23%	47%	30%	72% ↑	28% ↓
TOTAL	49%	51%	38%	35%	27%	25%	45%	30%	70%	30%

	<= Year 12	Trade / diploma	Degree+	Full-time	Part-time	Not working / student	< \$40k	\$40k - \$120k	\$120k+
Anti-litterer	32%	37%	31%	32% ↓	20% ↑	45% ↑	23%	47%	19%
TOTAL	31%	36%	33%	36%	18%	42%	22%	47%	21%

### 5.2.7 REPORTER ANTI-LITTERER (SEGMENT SIZE 10%)



- Non litterer
- Food-scraps litterer
- Occasional litterer
- Frequent litterer



- Non dumper
- Kerbside dumper
- Deliberate dumper

#### Key drivers of littering and dumping

aesthetics

Impact on environment
Visual and social

Being caught and fined Influenced by others

High perceived chance of getting fined

### Key barriers to reporting

54% Unable to take down details

29%↓ Waste of time

29% Unaware they can report

student 13%↓ \$120k

38%↑ ROQ

**Demographics** 

41%↑ <= Year 12

51%↑ Not working /

#### Behaviours, motivations and perceptions

#### **Behaviours**

- Least likely to litter
- Average dumpers
- More likely to have reported in the past

#### **Motivation**

- Highly motivated by visual and social aspects of waste disposal
- · Highly motivated by being caught and fined

#### **Environment**

- High concern about the impact of waste on the environment
- High belief in personal impact on the environment

#### Reporting and fines

- More likely to report others for littering and dumping in the future
- Barriers to reporting: Less likely to think reporting is a waste of time
- Believe their chances of getting fined are very high

#### **Ability**

High knowledge of legality

#### **Physical**

• More likely to say it is 'easy' for them to take waste to a tip

#### Social

- Less likely to perceive others' littering and illegal dumping behaviour as acceptable
- · More influenced by others

#### **Demographics**

	Male	Female	18-39	40-59	60+	Bris.	SEQ	ROQ	House	Unit / other
Reporter anti- litterers	47%	53%	36%	37%	27%	23%	39%	38% ↑	73%	27%
TOTAL	49%	51%	38%	35%	27%	25%	45%	30%	70%	30%

	<= Year 12	Trade / diploma	Degree+	Full-time	Part-time	Not working / student	< \$40k	\$40k - \$120k	\$120k+
Reporter anti- litterers	41% ↑	33%	26%	31%	14%	51% ↑	27%	50%	13% ↓
TOTAL	31%	36%	33%	36%	18%	42%	22%	47%	21%

### **5.3 Segment profile tables**

			Cost- conscious dumpers	Uninformed dumpers	Uninformed litterers	Helpless	Concerned but passive	Anti- litterers	Reporter anti- litterers	Total
		n=	70	99	344	68	124	1105	190	2000
		%	4%	5%	17%	3%	6%	55%	10%	100%
Question	1									
SQ2	Gender	Male	76% 个	61%	57% 个	49%	48%	44% ↓	47%	49%
<u> </u>	Gender	Female	24% ↓	39%	43% ↓	51%	52%	56% 个	53%	51%
		18-39 years	48%	72% 个	43%	37%	40%	33% ↓	36%	38%
SQ1	Age	40-59 years	48%	21% ↓	35%	41%	33%	35%	37%	35%
		60+ years	4% ↓	7% ↓	22%	23%	27%	32% ↑	27%	27%
		Brisbane	41% ↑	31%	25%	33%	25%	23%	23%	25%
SQ3	Region	SEQ (Except Brisbane)	24% ↓	46%	48%	44%	42%	47%	39%	45%
		ROQ	36%	23%	27%	23%	33%	30%	38% 个	30%
027	Danielline.	Detached house	51% ↓	58% ↓	68%	61%	72%	72% 个	73%	70%
Q37	Dwelling	Unit / other	49% 个	42% 个	32%	39%	28%	28% ↓	27%	30%
		Completed yr 12 or less	10% ↓	28%	29%	23%	26%	32%	41% 个	31%
Q38	Education	Certificate/trade/diploma	17% ↓	37%	34%	35%	43%	37%	33%	36%
		Degree+	73% 个	30%	35%	41%	30%	31%	26%	33%
		Employed full time	77% 个	44%	41%	40%	37%	32% ↓	31%	36%
Q39	Employment	Employed part time	10%	14%	18%	21%	17%	20% 个	14%	18%
		Not working / Student	11% ↓	34% ↓	38% ↓	38%	42%	<b>45%</b> ↑	51% 个	42%
		< \$40,000	6% ↓	21%	20%	13%	22%	23%	27%	22%
Q40	Income	\$40,001 - \$120,000	33% ↓	43%	48%	61%	44%	47%	50%	47%
		> \$120,000	59% 个	22%	22%	20%	16%	19%	13% ↓	21%
		Non dumper	43% ↓	62% ↓	88%	85%	87%	90% 个	84%	86%
Q2	Dumper	Kerbside dumper	10%	16%	8%	12%	10%	8%	14%	9%
		Deliberate dumper	47% 个	21% 个	4%	3%	3%	2% ↓	2%	5%
		Non litterer	7% ↓	13% ↓	34% ↓	42%	51%	55% 个	62% 个	47%
Q3 &		FoodScraps_Litterer	0% ↓	2% ↓	11%	12%	11%	12% ↑	5% ↓	10%
Q4	Litterer	Occasional litterer	11% ↓	26%	39% 个	22%	26%	25%	19% ↓	26%
		Frequent litterer	82% ↑	59% 个	17%	23%	12%	9% ↓	14%	17%
		Yes	56% ↑	11%	6% ↓	15%	14%	9% ↓	19% ↑	12%
Q25	Reported	No	44% ↓	79% ↓	93% 个	84%	85%	90% ↑	79% ↓	87%
			•		•			•		

			Cost- conscious dumpers	Uninformed dumpers	Uninformed litterers	Helpless	Concerned but passive	Anti- litterers	Reporter anti- litterers	Total
Questio	n	n= %	<i>70</i> 4%	<i>99</i> 5%	<i>344</i> 17%	<i>68</i> 3%	<i>124</i> 6%	<i>1105</i> 55%	<i>190</i> 10%	2000 100%
Question	1	Putting my rubbish in the bin will make a positive difference to the environment	4.2 ↓	3.5 ↓	4.1 ↓	1.5 ↓	4.6 ↑	4.7 ↑	4.9 ↑	4.4
	Personal impact	By recycling I am making a positive difference to the environment	4.3	3.4 ↓	4.0 ↓	1.4 ↓	4.5 个	4.7 ↑	4.8 ↑	4.4
Q8	on environment	Picking up other people's rubbish will make a positive difference to the environment	4.2	3.3 ↓	3.8 ↓	1.6 ↓	4.4 ↑	4.4 ↑	4.6 ↑	4.2
		I believe I can personally make a positive difference to the environment	4.3	3.4 ↓	3.6 ↓	1.8 ↓	4.3 ↑	4.4 ↑	4.7 ↑	4.2
		SUM Q8	16.9	13.6 ↓	15.5 ↓	6.4 ↓	18.0 个	18.2 个	19.0 个	17.2
		changed a car tyre and left it on the side of the road	4.3 ↑	2.8 ↑	1.4 ↑	1.1 ↓	1.1 ↓	1.0 ↓	1.0 ↓	1.3
		Left chewing gum in the street or under a seat	4.2 ↑	2.8 ↑	1.6 ↑	1.1 ↓	1.1 ↓	1.2 ↓	1.1 ↓	1.4
	How acceptable	Changed a car tyre and left it on the side of the road	4.2 ↑	2.9 ↑	1.5 ↑	1.2 ↓	1.1 ↓	1.1 ↓	1.1 ↓	1.4
	are others'	Left behind fishing tackle	4.3 ↑	3.0 ↑	1.7 个	1.3 ↓	1.1 ↓	1.2 ↓	1.1 ↓	1.4
Q9	behaviours	Dropped cigarette butts out of a vehicle	4.2 ↑	3.0 ↑	1.6 ↑	1.2 ↓	1.2 ↓	1.2 ↓	1.1 ↓	1.4
	(littering)	Left items under a seat at a cinema or sports stadium	4.2 ↑	2.8 ↑	1.9 ↑	1.5	1.3 ↓	1.4 ↓	1.2 ↓	1.6
		Placed rubbish beside an overflowing bin	4.4 ↑	3.1 ↑	2.4 ↑	2.0	1.7 ↓	1.8 ↓	1.4 ↓	2.0
		Released balloons at a celebration	4.2 ↑	3.1 ↑	2.9 ↑	2.5	2.1 ↓	2.4 ↓	2.1 ↓	2.5
		Left food scraps in a park, bushland or national park	4.3 ↑	3.0 ↑	2.2 ↑	1.6 ↓	1.4 ↓	1.5 ↓	1.2 ↓	1.8

			Cost- conscious dumpers	Uninformed dumpers	Uninformed litterers	Helpless	Concerned but passive	Anti- litterers	Reporter anti- litterers	Total
		n=	<i>70</i>	99 50	344	<i>68</i>	124	1105	190	2000
Question	)	<u>%</u>	4%	5%	17%	3%	6%	55%	10%	100%
		their household goods (e.g. appliances, TVs, toys, furniture) in a park, bushland or national park	4.2 ↑	3.0 ↑	1.3	1.0 ↓	1.0 ↓	1.0 ↓	1.0 ↓	1.3
		their general domestic waste on the side of the road (not in a bin)	4.3 ↑	2.9 ↑	1.4 ↑	1.2 ↓	1.1 ↓	1.1 ↓	1.0 ↓	1.3
	How acceptable	tyres, chemical drums and paint tins on the side of the road	4.3 ↑	2.9 ↑	1.4	1.1 ↓	1.0 ↓	1.0 ↓	1.0 ↓	1.3
Q10	are others' behaviours	tyres, chemical drums and paint tins in a park, bushland or national park	4.2 ↑	2.9 ↑	1.3	1.1 ↓	1.0 ↓	1.0 ↓	1.0 ↓	1.3
	(dumping)	their general domestic waste in a park, bushland or national park	4.3 ↑	2.9 ↑	1.3	1.1 ↓	1.0 ↓	1.0 ↓	1.0 ↓	1.3
		household goods (e.g. appliances, TVs, toys, furniture) on the side of the road	4.2 ↑	2.9 ↑	2.1 ↑	1.5	1.3 ↓	1.5 ↓	1.3 ↓	1.7
		their green waste in a park, bushland or national park	4.1 ↑	3.0 ↑	2.1 ↑	1.4 ↓	1.5 ↓	1.4 ↓	1.2 ↓	1.7
		household goods beside a charity bin	4.2 ↑	3.2 ↑	2.8 个	2.1	2.1 ↓	2.1 ↓	1.9 ↓	2.3
Q9 & Q10	How acceptable are others' behaviours	SUM Q9 & Q10	72.0 ↑	50.4 个	30.8 ↑	23.9 ↓	22.3 ↓	22.9 ↓	20.8 ↓	27.2
		Family	2.6 ↑	1.9	1.8 ↓	1.9	1.9	1.9 ↓	2.4 ↑	2.0
		Friends	2.4 ↑	1.9 个	1.6 ↓	1.8	1.5 ↓	1.7 ↓	2.1 ↑	1.7
		Neighbours	2.4 ↑	1.8 ↑	1.5 ↓	1.6	1.4 ↓	1.5 ↓	2.0 个	1.6
	Influence of	Work colleagues	2.3 ↑	1.7 个	1.4 ↓	1.6	1.4	1.4 ↓	1.8 个	1.5
Q11	others	Your local council (e.g. website or newsletters)	2.4 ↑	1.9 ↓	1.9 ↓	2.1	1.8 ↓	2.1	2.5 ↑	2.1
		State Government (website)	2.4 ↑	1.8	1.6 ↓	1.8	1.5 ↓	1.7 ↓	2.3 个	1.8
		Social media	2.5 ↑	1.8 ↑	1.4 ↓	1.5	1.4	1.4 ↓	1.8 个	1.5
		TV/ Radio	2.4 ↑	1.8 个	1.4 ↓	1.7	1.5 ↓	1.5 ↓	2.0 个	1.6

			Cost- conscious dumpers	Uninformed dumpers	Uninformed litterers	Helpless	Concerned but passive	Anti- litterers	Reporter anti- litterers	Total
		n=	70	99	344	68	124	1105	190	2000
Question	n	%	4%	5%	17%	3%	6%	55%	10%	100%
		Animals eating waste items or being strangled or entangled by waste items	4.2	3.2 ↓	3.3 ↓	4.2	4.4 ↑	4.4 ↑	4.6 ↑	4.1
	Impact of waste	Impact on your own health (e.g. by drinking water and/or needle stick injuries)	4.1 ↑	3.1 ↓	2.9 ↓	3.7	3.9	3.9 ↑	4.5 ↑	3.8
Q13	on environment	General environmental impact (i.e. ecosystems and wildlife habitat, etc)	4.1	3.0 ↓	3.1 ↓	4.0	4.2 ↑	4.2 ↑	4.6 ↑	4.0
		Impact on your general enjoyment of the environment	4.0	3.0 ↓	3.0 ↓	3.7	3.9	4.0 ↑	4.4 ↑	3.8
		SUM Q13	16.5 个	12.3 ↓	12.4 ↓	15.6	16.4 个	16.6 个	18.1 个	15.7
		wouldn't consider leaving waste in a public place because it would look ugly	4.1	3.1 ↓	3.9 ↓	4.4	2.6 ↓	4.7 ↑	4.8 ↑	4.3
		wouldn't consider leaving waste in a public place because someone else would have to pick it up	4.2	3.0 ↓	3.9 ↓	4.1	2.4 ↓	4.6 ↑	4.6 ↑	4.2
Q14	Motivation litter	wouldn't consider leaving small waste items in a public place because I would be too worried about getting caught	4.2 个	3.0 ↓	3.2 ↓	3.3	1.9 ↓	3.6 ↑	4.4 ↑	3.5
		wouldn't consider leaving small waste items in a public place because I would be worried about the size of the fine	4.2 个	3.1 ↓	3.2 ↓	3.4	1.8 ↓	3.6 ↑	4.3 ↑	3.5
		would consider leaving food waste in a park, bushland or national park because it is biodegradable	4.1 ↑	3.2 ↑	3.0 ↑	2.3	2.1 ↓	2.4 ↓	2.3 ↓	2.6

			Cost- conscious dumpers	Uninformed dumpers	Uninformed litterers	Helpless	Concerned but passive	Anti- litterers	Reporter anti- litterers	Total
		n=	70	99	344	68	124	1105	190	2000
Questio	n	<u>%</u>	4%	5%	17%	3%	6%	55%	10%	100%
		I wouldn't consider leaving waste in a public place because someone else would have to pick it up	4.2	3.2 ↓	3.9 ↓	4.5	2.1 ↓	4.6 个	4.7 ↑	4.2
		I wouldn't consider leaving waste in a public place because it would look ugly	4.2	3.0 ↓	3.9 ↓	4.6 ↑	1.9 ↓	4.6 ↑	4.8 ↑	4.2
		I wouldn't consider leaving large volumes of waste in a public place because I would be too worried about getting caught	4.2 ↑	3.2 ↓	3.4 ↓	3.7	1.6 ↓	3.7 ↑	4.4 ↑	3.6
Q15	Motivation dumping	I wouldn't consider leaving large volumes of waste in a public place because I would be worried about the size of the fine	4.1 ↑	3.2 ↓	3.5	3.8	1.7 ↓	3.7 ↑	4.3 ↑	3.6
		It costs too much to take waste to the rubbish tip these days	4.1 ↑	3.1 ↑	3.0 ↑	2.8	2.3 ↓	2.7 ↓	2.7	2.8
		I would consider leaving large volumes of waste in a public place if I knew that it wouldn't damage the environment	4.1 ↑	3.1 ↑	2.4 ↑	1.9	1.6 ↓	1.8 ↓	1.9	2.1
		I would consider leaving large volumes of waste in a public place because of the cost of taking it to the rubbish tip	4.0 ↑	2.8 ↑	2.1 ↑	1.6	1.4 ↓	1.6 ↓	1.6	1.8
		Placed a bottle or can beside an overflowing bin	5.1 ↑	4.2 ↑	1.6 ↓	1.8	1.4 ↓	1.4 ↓	5.2 ↑	2.1
		Left a bottle or can on the street	4.7 ↑	4.7 个	1.8 ↓	2.4	1.7 ↓	1.6 ↓	5.9 个	2.4
	Perception of chances of	Dropped cigarette butts out of a moving vehicle	5.2 ↑	4.2 ↑	2.2 ↓	2.9	1.9 ↓	2.2 ↓	6.9 ↑	2.9
Q16	getting fined (littering)	Dropped a small bag of rubbish out of a moving vehicle	4.9 ↑	4.7 ↑	2.7 ↓	3.3	2.2 ↓	2.7 ↓	7.4 ↑	3.3
	. 5,	Left food scraps in a park, bushland or national park	4.9 ↑	4.9 ↑	1.8 ↓	2.2	1.7 ↓	1.6 ↓	5.9 个	2.4
		Releasing balloons as part of a celebration	5.1 ↑	4.1 ↑	1.7 ↓	2.1	1.7 ↓	1.6 ↓	5.1 ↑	2.3

			Cost- conscious dumpers	Uninformed dumpers	Uninformed litterers	Helpless	Concerned but passive	Anti- litterers	Reporter anti- litterers	Total
		n=	70	99	344	68	124	1105	190	2000
Question		%	4%	5%	17%	3%	6%	55%	10%	100%
		Left on the street near your home (not in a bin)	5.5 个	4.6 ↑	3.2 ↓	3.8	3.2	3.2 ↓	7.5 个	3.8
		On the side of a highway or large road	5.4 ↑	5.2 ↑	3.4 ↓	4.0	3.2 ↓	3.4 ↓	7.6 个	4.0
	Perception of	In a local park	5.2 ↑	4.7 ↑	3.3 ↓	3.9	3.1 ↓	3.5 ↓	7.8 个	4.0
017	chances of	In a park, bushland or national park	5.4 个	5.0 ↑	3.1 ↓	3.7	3.0 ↓	3.0 ↓	7.4 ↑	3.7
ζ_/	getting fined (dumping)	Disposed of in a business' rubbish bin (not your own business)	4.9 ↑	4.2 ↑	2.3 ↓	3.1	2.4 ↓	2.5 ↓	6.5 ↑	3.0
		Beside a Charity bin or outside a charity store	5.2 个	4.6 ↑	2.6 ↓	3.2	2.4 ↓	2.7 ↓	7.2 ↑	3.3
		On a vacant block of land	4.9 ↑	4.6 ↑	2.9 ↓	3.2	2.5 ↓	2.8 ↓	7.2 个	3.4
Q16 & Q17	Perception of chances of getting fined	SUM Q16 & Q17	66.3 ↑	60.7 ↑	33.3 ↓	39.4	29.9 ↓	29.5 ↓	89.1 ↑	39.6
		Myself	49%	28%	37%	31%	40%	41%	41%	40%
		Neighbours	17%	20%	16%	16%	11%	17%	24%	17%
		Community or school groups	32% ↑	24% ↑	13%	10%	18%	13%	15%	15%
Q20	Perception of	Environmental groups and charities	33%	29%	16% ↓	31%	23%	21%	23%	22%
Q20	responsibility	Businesses	35%	18%	26%	22%	21%	27%	23%	26%
		Land owners	23%	26%	20%	27%	22%	27%	29%	25%
		Local councils	40% ↓	48% ↓	83%	83%	81%	89% 个	79%	83%
		State Government	48%	44%	43% ↓	59%	57%	54% 个	43%	51%

			Cost- conscious dumpers	Uninformed dumpers	Uninformed litterers	Helpless	Concerned but passive	Anti- litterers	Reporter anti- litterers	Total
		n=	70	99	344	68	124	1105	190	2000
Question	1	%	4%	5%	17%	3%	6%	55%	10%	100%
		Dropping something out the window of a moving vehicle	1.6 ↓	1.9 ↓	2.0 ↑	2.0 ↑	2.0	2.0 ↑	2.0 ↑	2.0
		Leaving green waste in a park, bushland or national park	1.5 ↓	1.8 ↓	1.9	1.9	2.0 ↑	2.0 ↑	2.0 ↑	1.9
		Leaving household goods outside of a landfill/ transfer station	1.4 ↓	1.6 ↓	1.9	1.9	1.9	1.9 ↑	1.9	1.9
Q21	Knowledge of	Leaving furniture on the side of the road outside your home (outside of kerbside pickup times)	1.4 ↓	1.5 ↓	1.8	1.9	1.9	1.8 ↑	1.9	1.8
Q21	legality	Leaving household rubbish beside a public bin (if bin is full)	1.4 ↓	1.6 ↓	1.8 ↓	1.9	1.9 ↑	1.9 ↑	1.9 ↑	1.8
		Leaving household goods outside a charity shop and/or next to a charity bin	1.4 ↓	1.6	1.6 ↓	1.7	1.7	1.7 ↑	1.8 ↑	1.7
		Releasing balloons at a celebration or memorial	1.4	1.5	1.4 ↓	1.4	1.6	1.5	1.7 ↑	1.5
		Putting general domestic waste in a wheelie bin for collection by the council	1.3 ↑	1.5 ↑	1.1	1.1	1.1	1.1 ↓	1.1	1.1
		SUM Q12 (minus final statement)	9.8 ↓	11.4 ↓	12.2	12.4	13.2 ↑	12.8 个	13.0 个	12.5
		Your local council	42% ↓	36% ↓	72%	82%	78%	83% ↑	78%	77%
	Knowledge of	State Government - Department of Environment and Science	35% 个	27%	13% ↓	29%	24%	22%	26%	22%
Q22	reporting lines	Queensland Parks and Wildlife Service	40% ↑	26%	14% ↓	23%	29%	28% ↑	23%	26%
	(NET littering &	Other State Government department	32% 个	20% 个	6%	15%	8%	8% ↓	13%	10%
	dumping)	My Local MP or councillor	43% 个	26%	16% ↓	18%	17%	20%	26%	21%
		Queensland Police Service	40%	28%	28% ↓	39%	43%	41%	47%	39%

			Cost- conscious dumpers	Uninformed dumpers	Uninformed litterers	Helpless	Concerned but passive	Anti- litterers	Reporter anti- litterers	Total
		n=	70	99	344	68	124	1105	190	2000
Question		%	4%	5%	17%	3%	6%	55%	10%	100%
		Flick a cigarette butt into dry grass or bushland	3.9 ↑	3.0 ↓	3.1 ↓	3.1 ↓	3.6	3.6 ↑	4.3 ↑	3.5
		Empty their car of waste onto a carpark or roadside	4.1 ↑	3.0 ↓	3.0 ↓	3.1 ↓	3.6	3.6 ↑	4.3 ↑	3.5
	Likelihood of	Flick a cigarette butt onto the road, footpath or gutter	3.9 ↑	2.8	2.4 ↓	3.0	2.8	2.7 ↓	3.7 ↑	2.8
Q23	reporting someone else	Throw a can, bottle or drink container from a car onto a road, footpath or gutter	4.0 ↑	3.0	2.6 ↓	3.1	3.0	2.9 ↓	3.9 ↑	3.0
	(littering)	Leave rubbish behind on a public picnic table, chair or bench	3.9 ↑	3.0	2.4 ↓	2.8	2.7	2.7 ↓	3.6 ↑	2.8
		Leave rubbish behind at an event, stadium or concert	4.0 ↑	3.0 ↑	2.2 ↓	2.9 ↑	2.5	2.4 ↓	3.4 ↑	2.5
		Releasing balloons as part of a celebration	3.9 ↑	2.9 个	1.9 ↓	2.9 ↑	2.4	2.1 ↓	2.8 ↑	2.3
		Throw an apple core into a park, bushland or national park	3.9 ↑	3.0 ↑	1.9 ↓	3.0 ↑	2.2	1.8 ↓	2.6 ↑	2.1
		tyres, chemical drums and paint tins in a park, bushland or national park	4.2 ↑	3.0 ↓	3.5 ↓	3.1 ↓	3.9	4.1 ↑	4.6 ↑	4.0
		tyres, chemical drums and paint tins on the side of the road, carpark or footpath	4.0	3.1 ↓	3.4 ↓	3.1 ↓	3.8	4.0 ↑	4.6 ↑	3.9
	Likelihood of	their household goods in a park, bushland or national park	4.0	3.1 ↓	3.4 ↓	3.1 ↓	3.7	4.0 ↑	4.5 ↑	3.9
Q24	reporting someone else	their general domestic waste in a park, bushland or national park	4.1 ↑	3.2 ↓	3.3 ↓	3.1 ↓	3.6	3.9 ↑	4.5 ↑	3.8
	(dumping)	their general domestic waste on the side of the road, carpark or footpath (not in a bin)	4.1 ↑	3.0 ↓	3.1 ↓	3.0 ↓	3.5	3.6 ↑	4.3 ↑	3.6
		household goods on the side of the road, carpark or footpath	4.0 ↑	3.0 ↓	2.9 ↓	3.1	3.3	3.5 ↑	4.2 ↑	3.4
		their green waste in a park, bushland or national park	4.1 ↑	2.9 ↓	2.7 ↓	3.1	3.2	3.3	4.1 ↑	3.3
		household goods/clothes beside a charity bin	4.0 ↑	3.0 ↑	2.3 ↓	3.0 ↑	2.5	2.5 ↓	3.3 ↑	2.7

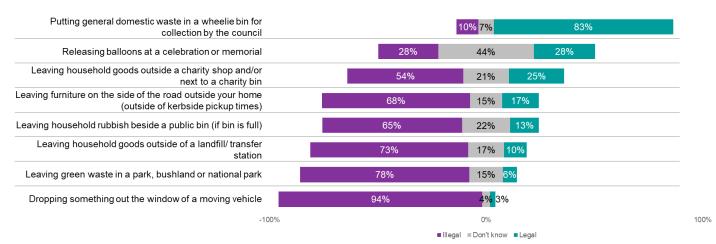
			Cost- conscious dumpers	Uninformed dumpers	Uninformed litterers	Helpless	Concerned but passive	Anti- litterers	Reporter anti- litterers	Total
		n=	70	99	344	68	124	1105	190	2000
Question		%	4%	5%	17%	3%	6%	55%	10%	100%
Q23 & Q24	Likelihood of reporting someone else	SUM Q23 & Q24	64.0 ↑	48.1 ↓	43.8 ↓	48.5	50.2	50.9	62.7 ↑	51.0
025	Reporting	Littering	2.3 ↑	1.5	1.3 ↓	1.5	1.5	1.4 ↓	1.6 个	1.5
Q25	behaviour	Illegal Dumping	2.2 ↑	1.3	1.3 ↓	1.5	1.4	1.4 ↓	1.6 个	1.4
		The reporting process is inconvenient and/or difficult	0%	0%	4%	7%	1%	4%	2%	3%
		I don't see it as a problem	20% ↑	13% ↑	3%	1%	1%	2% ↓	4%	3%
	Reporting barriers	It's not my responsibility	13%	23% ↑	12% 个	13%	5%	4% ↓	4%	7%
		I didn't know I could report it/ or how to report it	27%	34%	36%	25%	34%	38% ↑	29%	36%
		I was unable to take down the required details at the time of the incident	49%	17% ↓	41% ↓	59%	50%	56% 个	54%	51%
Q26		I don't want to go to court	20%	25%	18%	9%	10%	16%	18%	17%
		I wouldn't want to get the offender in trouble/ fined	36% 个	21% ↑	6%	3%	3%	3% ↓	6%	6%
		I don't think it is right to report on others	20% 个	26% 个	6%	3%	5%	3% ↓	6%	6%
		I am worried that the offender would find out I reported	46% 个	25%	25%	29%	19%	27%	29%	27%
		Waste of time, I don't think that anything would be done with my report	28%	28% ↓	42%	51%	35%	44% 个	29% ↓	41%
Q6	Ease of waste	NET easy	61%	32% ↓	48% ↓	28% ↓	59%	62% 个	69% 个	57%
Ų0	disposal	NET difficult	28%	21%	24%	50% 个	26%	20% ↓	18%	22%
Q34	Access to:	Car	88%	67% ↓	94%	91%	94%	93% 个	92%	92%
Ų34	Access to:	Trailer	72% ↑	34%	28%	29%	36%	30%	27%	32%

# 5.4 Perception of legality – full list of subgroup differences

### 5.4.1 Perception of legality

The figure belowFigure 22 shows the perception of legality in disposing waste among Queensland residents. Most Queenslanders have correct perceptions around legal acts when it comes to waste disposal. The major exception is releasing balloons during celebration events or memorials – equal proportions of residents perceive it as legal and illegal (28%). More than two in five (44%) indicated they did not know.

Figure 28. Legality of waste disposal



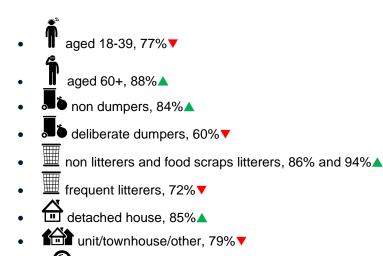
Base: All respondents, n=2000

Q21. Some methods of waste disposal are legal, and others are not legal. Please indicate whether you think the following are legal or illegal.

Significant differences observed for the perception of legality of each action are shown below.

#### 1. 'Putting general domestic waste in a wheelie bin for collection by the council'

a. Legal - 83%



not working, 87%▲

- CALD, 75%▼
- non-CALD, 85%▲

#### b. Illegal - 10%

- ¶ aged 18-39, 13%▲
- ¶ aged 60+, 6%▼
- non dumpers, 9%▼
- deliberate dumpers, 33%▲
- mon litterers and food scraps litterers, 8% and 2%▼
- detached house, 9%▼
- unit/townhouse/other, 13%▲
- CALD, 17%▲
- non-CALD, 9%▼

#### c. Don't know - 7%

- ¶ aged 18-39, 10%▲
- ¶ aged 40-59, 5%▼
- reported littering/illegal dumping, 3%▼
- not working, 5%▼
- non-CALD, 6%▼

#### 2. 'Releasing balloons at a celebration or memorial'

- a. Legal 28%
- deliberate dumpers, 47%▲
- non litterers, 25%▼
- frequent litterers, 39%

- reported littering/illegal dumping, 40%▲
- never reported littering/illegal dumping, 27%▼
- employed full time, 33%▲
- household income > \$120,000, 35%▲
  - c. Illegal 28%
- certificate/trade/diploma, 32%
  - d. Don't know 44%
- ¶ aged 18-39, 39%▼
- ¶ aged 60+, 50%▲
- non dumpers, 45%

  ▲
- deliberate dumpers, 17%▼
- frequent litterers, 35%
- reported littering/illegal dumping, 29%▼
- never reported littering/illegal dumping, 46%▲
- household income > \$120,000, 35%▼
- 3. Leaving household goods outside a charity shop and/or next to a charity bin
  - a. Legal 25%
- ¶ aged 18-39, 33%▲
- ¶ aged 60+, 16%▼
- ■ non dumpers, 23%▼
- kerbside dumpers and deliberate dumpers, 34% and 46%▲
- mon litterers, 20%▼
- frequent litterers, 38%
- reported littering/illegal dumping, 32%▲
- employed part time, 31%
- not working, 20%▼

- non-CALD, 25%▼
- CALD, 35%
  - c. Illegal 54%
- . O male, 57%▲
- + female, 50%▼
- ¶ aged 18-39, 44%▼
- ¶ aged 60+, 65%▲
- Rest of Queensland, 47%▼
- non dumpers, 55%▲
- deliberate dumpers, 40%▼
- non litterers, 59%▲
- occasional litterers, 49%

  ✓
- Image: frequent litterers, 45% ▼
- employed part time, 47%▼
- not working, 59%▲
- \$\student, 34%▼
- non-CALD, 55%▲
- CALD, 41%▼
  - d. Don't know 21%
- reported littering/illegal dumping, 14%▼
- 4. Leaving furniture on the side of the road outside your home (outside of kerbside pickup times)
  - a. Legal 17%
- ¶ aged 18-39, 23%▲
- ¶ aged 60+, 10%▼
- non dumpers, 15%▼
- deliberate dumpers, 46%▲

- non litterers, 11%▼ frequent litterers, 33%▲ reported littering/illegal dumping, 25% never reported littering/illegal dumping, 16% employed full time, 20%▲ not working, 12%▼ non-CALD, 16%▼ CALD, 26%▲ b. Illegal - 68% aged 18-39, 59%▼ aged 60+, 80%▲ non dumpers, 71%▲ deliberate dumpers, 41%▼ non litterers, 76%▲ frequent litterers, 50%▼ not working, 75%▲ student, 52%▼ non-CALD, 70%▲ CALD, 60%▼ c. Don't know - 15% male, 12%▼ female, 18%▲ aged 18-39, 18% aged 60+, 10%▼
- 5. Leaving household rubbish beside a public bin (if bin is full)

🖢 reported littering/illegal dumping, 8%🔻

#### a. Legal - 13%

- ¶ aged 18-39, 17%▲
- ged 60+, 8%▼
- ■ non dumpers, 11%▼
- deliberate dumpers, 41%▲
- non litterers, 7%▼
- frequent litterers, 28%
- reported littering/illegal dumping, 25%▲
- never reported littering/illegal dumping, 12%▼
- degree+, 18%▲
- mployed full time, 17%▲
- not working, 9%▼

#### c. Illegal - 65%

- . O male, 67%▲
- ♀ female, 62%▼
- ¶ aged 18-39, 57%▼
- aged 60+, 73%▲
- ■ non dumpers, 66% ▲
- deliberate dumpers, 43%▼
- non litterers, 72%▲
- occasional litterers and frequent litterers, 60% and 51%▼
- degree+, 61%▼
- not working, 71%▲
- student, 47%▼
- non-CALD, 66%▲

#### d. Don't know - 22%

- . O male, 19%▼

- non dumpers, 23%▲
- reported littering/illegal dumping, 12%▼
- never reported littering/illegal dumping, 24%▲

#### 6. Leaving household goods outside of a landfill/ transfer station

#### a. Legal - 10%

- ¶ aged 18-39, 14%▲
- ¶ aged 60+, 6%▼
- ■ non dumpers, 8%▼
- deliberate dumpers, 42%▲
- non litterers, 6%▼
- frequent litterers, 26%▲
- reported littering/illegal dumping, 22%▲
- never reported littering/illegal dumping, 9%▼
- detached house, 9%▼
- unit/townhouse/other, 14%
- degree+, 13%▲
- employed full time, 14%▲
- not working, 8%▼
- household income > \$120,000, 16%▲
- non-CALD, 10%▼
- CALD, 15%▲

#### b. Illegal - 73%

- ¶ aged 18-39, 65%▼
- **a**ged 60+, 82%▲
- John non dumpers, 75%▲
- deliberate dumpers, 47%▼

- non litterers, 80%▲
- detached house, 75%▲
- unit/townhouse/other, 68%▼
- ¶ employed full time, 69%▼
- not working, 79%▲
- \$\student, 55%▼
- non-CALD, 74%▲
- CALD, 61%▼

#### c. Don't know - 17%

- ¶ aged 18-39, 22%▲
- **1** aged 60+, 12%▼
- occasional litterers, 20%▲
- reported littering/illegal dumping, 8%▼
- never reported littering/illegal dumping, 18%▲
- not working, 14%▼
- student, 32%

  ▲
- non-CALD, 16%▼
- CALD, 23%

#### 7. Leaving green waste in a park, bushland or national park

#### a. Legal - 6%

- ¶ aged 18-39, 10%▲
- aged 60+, 2%▼
- Brisbane, 9%▲
- non dumpers, 5%▼

■ deliberate dumpers, 27% ▲ non litterers, 2%▼ frequent litterers, 20%▲ reported littering/illegal dumping, 17% never reported littering/illegal dumping, 5% 🔻 detached house, 5%▼ time unit/townhouse/other, 10%▲ year 12 or less, 4%▼ certificate/trade/diploma, 5%▼ degree+, 10%▲ employed full time, 10%▲ not working, 3%▼ **ⓑ** household income > \$120,000, 10%▲ non-CALD, 6%▼ CALD, 10%▲ b. Illegal - 78% male, 81%▲ female, 76%▼ aged 18-39, 67%▼ aged 60+, 89%▲ Brisbane, 74%▼ South East Queensland, 80%▲ ┛• non dumpers, 80%▲ ■ deliberate dumpers, 60%▼ non litterers, 85%▲

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frequent litterers, 63%▼

detached house, 80%

unit/townhouse/other, 73%▼

never reported littering/illegal dumping, 79%

- degree+, 75%▼
- not working, 84%▲
- student, 58%
  ▼
- household income up to \$40,000, 82%
- non-CALD, 79%▲
- CALD, 70%▼

#### c. Don't know - 15%

- O male, 12%▼

- aged 40-59, 12%▼
- . 1 aged 60+, 9%▼
- non litterers, 13%▼
- □ occasional litterers, 19%
   □
- reported littering/illegal dumping, 8%▼
- not working, 13%▼
- student, 32%
  ▲
- non-CALD, 15%▼

#### 8. Dropping something out the window of a moving vehicle

#### b. Legal - 3%

- O male, 4%▲
- ¶ aged 18-39, 4%▲
- **1** aged 60+, 0%▼
- non dumpers, 1%▼
- deliberate dumpers, 24%▲
- ■ non litterers, food scraps litterers and occasional litterers, 0%, 0% and 1%▼

frequent litterers, 12%▲ reported littering/illegal dumping, 10% never reported littering/illegal dumping, 2% V detached house, 2%▼ unit/townhouse/other, 4% ndegree+, 4%▲ employed full time, 4% not working, 1%▼ household income > \$120,000, 6% non-CALD, 6%▼ CALD, 10%▲ c. Illegal - 94% male, 93%▼ female, 95%▲ aged 18-39, 91%▼ aged 60+, 99%▲ Ď non dumpers, 95%▲ b deliberate dumpers, 68%▼ non litterers and food scraps litterers, 98% and 99% frequent litterers, 80% reported littering/illegal dumping, 89% 🔻 never reported littering/illegal dumping, 95% detached house, 95% unit/townhouse/other, 91%▼ employed full time, 92%▼ not working, 97%▲ student, 87%▼ non-CALD, 95%▲

d. Don't know - 4%

aged 18-39, 6%▲ aged 60+, 1%▼ ■ deliberate dumpers, 8% ▲ non litterers and food scraps litterers, 2% and 1%▼ frequent litterers, 8% not working, 2%▼ 🦊 student, 10%▲ non-CALD, 3%▼

### 5.5 Questionnaire

#### **SECTION A: SCREENER QUESTIONS**

#### <ASK ALL>

[Stand	ard Screener: DO NOT MODIFY OR TRANSLATE
SQ1.	YEAR/MONTH. What is your date of birth?
	YEAR/MONTH. What is your date of birth?  YEAR _1910 19102015 2015 MONTH _1 January _2 February _3 March _4 April _5 May _6 June _7 July
	_8 August
	_9 September _10 October
	_11 November
	_12 December

#### [IF UNDER 18 TERMINATE. OTHERWISE, CONTINUE.]

#### [RECORD AGE INTO THE FOLLOWING HIDDEN SCALE]

Age range	S1a Age range for weighting
18-29 years	01
30-39 years	02
40-49 years	03
50-59 years	04
60-69 years	05

	_	
70+	years	06
		NEW SCREEN
<ask a<="" td=""><td>ALL&gt;</td><td></td></ask>	ALL>	
<b>50</b> (	I DO NOT	MODIEV OF TRANSI
[Stand	lard Screener: DO NOT	MODIFY OR TRANSLA
SQ2.	GENDER_NONBINAR	Y Are you?
0	_1 Male	
	_2 Female	
	_3 Other _4 Prefer not to answe	r
O	_4 Freiei not to answe	I
		NEW SCREEN
		NEW COREER
4.016	N	
<ask a<="" td=""><td>ALL&gt;</td><td></td></ask>	ALL>	
[Stand	lard Screener: DO NOT	MODIFY OR TRANSLA
SQ3.	QMKTSIZE_AU. Pleas	e insert vour residentia
		<b>,</b>

### [RECORD REGION INTO THE FOLLOWING HIDDEN SCALE]

	SQ3a Region
Brisbane	1
SEQ (Except Brisbane)	2
ROQ	3

#### <ASK ALL>

Postcode: City / Town: State:

**SQ4.** Do you work in any of the following areas?

{SINGLE RESPONSE}

#### <RANDOMISE ROWS>

Market research	1	TERMINATE
Advertising or media	2	TERMINATE
Waste	3	TERMINATE
Local council	4	TERMINATE
Education	5	
Health	6	
None of the above [ANCHOR LAST]	9	

------NEW SCREEN ------

---

#### **Termination script:**

We would like to thank you for taking the time to participate in our survey. Your opinions and responses are gratefully received and extremely important to us.

The survey is now closed due to overwhelming responses from people like yourself.

#### **SECTION B: BEHAVIOURS**

[INSERT TIME STAMP FOR SECTION]

**Q1.** Thinking only about amounts **larger than a wheelie bin load**, which of the following have you disposed of from your household in the last 12 months? *Please select any that apply.* 

{MUTLIPLE}

BEHAVIOUR 3. DUMPING

#### [RANDOMISE ROWS. ALWAYS KEEP 1 & 2 TOGETHER, BUT RANDOMISE THEIR ORDER]

General domestic waste (e.g. food scraps, non-recyclable packaging)	1
Household recyclables (e.g. paper, cardboard, plastic containers, bottles)	2
Furniture, white goods or bulky household items	3
Clothing	4
Hazardous chemicals (e.g. paint, motor oil, batteries or pesticide)	5
Construction and/ or demolition materials (e.g. from renovations)	6
Asbestos or materials containing asbestos	7
Green waste (including lawn clippings, tree branches, soil and palm fronds)	8
Tyres	9
None of the above [ANCHOR]	97

**Q2.** And still thinking only about amounts **larger than a wheelie bin load**, how have you disposed of each of these things in the last 12 months? *Please select any that apply.* 

{MULTIPLE PER ROW} BEHAVIOUR 3. DUMPING

[ASK IF PREVIOUS QUESTION~=97]

[RANDOMISE COLUMNS. KEEP 3 AND 4 TOGETHER AND IN ORDER. KEEP 6 AND 7 TOGETHER AND IN ORDER]

[ONLY SHOW ROWS SELECTED IN PREVIOUS QUESTION. SHOW ROWS IN SAME ORDER AS IN PREVIOUS QUESTION]

Form		1 Weekly/fortnightly council kerbside	2 Council kerbside collection of large	3 Placed on the side of the road	4 Placed on side of road elsewhere	5 Disposed of at a landfill, rubbish tip	6 Disposed of on your own land	7 Disposed of on public land or	8 Paid a waste removal service	9 Taken to a charity shop or donated in a bin	30ld it/gave it away/had someone	96 Other [SPECIFY]
1	General domestic waste											
2	Household recyclables											
3	Furniture, white goods or bulky household items											
4	Clothing											
5	Hazardous chemicals (such as paint, motor oil, batteries or pesticide)											
6	Construction or demolition materials											
7	Asbestos or material containing asbestos											
8	Green waste (including lawn clippings, tree branches, soil and palm fronds)											
9	Tyres											

**Q3.** Please indicate how often you have thrown away any of the following items in public places without placing them in the bin?

{SINGLE PER ROW}
BEHAVIOUR 3. LITTERING

#### [RANDOMISE ROWS, REVERSE COLUMNS FOR 50%]

		Never	Occasionally	Frequently
1	Takeaway coffee/ tea cups	1	2	3
2	Cigarette butts	1	2	3
3	Water bottles, soft drink bottles and cans	1	2	3
4	Plastic packaging (e.g. chip packets, lolly wrappers, lollipop sticks)	1	2	3
5	Takeaway food packaging	1	2	3
6	Plastic drinking straws, utensils and stirrers	1	2	3
7	Food scraps	1	2	3
8	Papers (e.g. advertising, flyers, newspapers)	1	2	3
9	Fishing tackle and bait bags	1	2	3
10	Plastic bags	1	2	3

### **Q4.** Which of the following have you done in the past 12 months?

{SINGLE}

BEHAVIOUR 3. LITTERING (CONVENIENCE)

#### [RANDOMISE STATEMENTS. USE PROGRESSIVE GRID]

	[DO NOT SHOW WORDS IN THE BRACKETS]	Never	Occasionally	Frequently
1	[INCHING] Left waste items behind and being careful that no one saw	1	2	3
2	[FLAGRANT FLINGING] Thrown or dropped waste items without being worried whether anyone saw you	1	2	3
3	[OUT OF THE WAY] Left waste items somewhere out-of-the-way so it wouldn't get in the way of others	1	2	3
4	[FOUL SHOOTING] Thrown waste items at a bin and left it on the ground if you missed	1	2	3
5	[WEDGING] Stuffed waste items into gaps (for example, between train seats or between the slats on a picnic table)	1	2	3
6	[VEHICLE] Thrown or dropped waste items from a moving vehicle	1	2	3

# **Q5.** Are you aware of the following waste services in your area, and have you used them in the past 12 months?

{SINGLE}

**ABILITY 3. DUMPING** 

**REVERSE ROWS FOR 50%** 

		I have <u>used</u> this service	I am <u>aware</u> that this service is available in my area, but I <u>haven't</u> used it	I'm <u>unaware</u> of this service in my area	This service is <u>not</u> <u>offered</u> in my area
1	Scheduled council collection of <u>large or</u> <u>bulky items</u> from the side of the road outside your home	1	2	3	4
2	Self-haul to Landfill, rubbish tip or transfer station	1	2	3	4
3	Asbestos removal and disposal services	1	2	3	4
4	Charity drop off at bin or store	1	2	3	4
5	Green waste collection service (Council or private)	1	2	3	4
6	Hired someone to dispose of items for me	1	2	3	4
7	Container Refund Points for bottles and cans	1	2	3	4
8	Paid/ left tyres with mechanic/ garage for disposal.	1	2	3	4

**Q6.** And how easy or difficult would you say it is for you to take waste to your nearest landfill, rubbish tip or transfer station?

{SINGLE}

MOTIVATIO/PHYSICAL 3. DUMPING

# [REVERSE ROWS FOR 50% - PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT]

Very easy	5
Fairly easy	4
Neither easy nor difficult	3
Fairly difficult	2
Very Difficult	1
Don't know [ANCHOR]	97

#### <ASK IF PREVIOUS QUESTION = 4 OR 5>

Note, incorrect routing from previous question was used in the final version in error.

Q7. You said earlier that you find it <VERY/FAIRLY - CODE FROM PREVIOUS Q> difficult to take waste to the landfill, or rubbish tip or transfer station. Why is that?

{OPEN ENDED}

MOTIVATION/PHYSICAL 3. DUMPING

[OPEN ENDED TEXT RESPONSE]

#### **SECTION C: ATTITUDES AND PERCEPTIONS**

[INSERT TIME STAMP FOR SECTION]

 ${\bf Q8.}$  To what extent do you personally agree or disagree with each of the statements below?  $\{{\tt SINGLE}\}$ 

**MOTIVATION 3. LITTERING** 

# RANDOMISE STATEMENTS. USE PROGRESSIVE GRID – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT

		Strongly disagree	Somewh at disagree	Neither agree nor disagree	Somewh at agree	Strongly agree	Don't know / not sure
1	I believe I can personally make a positive difference to the environment	1	2	3	4	5	6
2	Putting my rubbish in the bin will make a positive difference to the environment	1	2	3	4	5	6
3	Picking up other people's rubbish will make a positive difference to the environment	1	2	3	4	5	6
4	By recycling I am making a positive difference to the environment	1	2	3	4	5	6

#### <ROTATE ORDER OF THIS AND NEXT QUESTION>

**Q9.** How acceptable or unacceptable would you find another person's behaviour if they...? {SINGLE PER ROW} SOCIAL 3. LITTERING

### RANDOMISE ROWS, REVERSE COLUMNS FOR 50% – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT

		Very Unacceptable	Somewhat Unacceptable	Neither acceptable nor unacceptable	Somewhat acceptable	Very Acceptable
1	Left chewing gum in the street or under a seat	1	2	3	4	5
2	Dropped cigarette butts out of a vehicle	1	2	3	4	5

3	Dropped fast food packaging or bottles/cans out of a vehicle	1	2	3	4	5
4	Left food scraps in a park, bushland or national park	1	2	3	4	5
5	Released balloons at a celebration	1	2	3	4	5
6	Left behind fishing tackle	1	2	3	4	5
7	Left items under a seat at a cinema or sports stadium	1	2	3	4	5
8	Placed rubbish beside an overflowing bin	1	2	3	4	5
9	Changed a car tyre and left it on the side of the road	1	2	3	4	5

**Q10.** How acceptable or unacceptable would you find another person's behaviour if they...?

{SINGLE PER ROW} SOCIAL 3. DUMPING

# [RANDOMISE ROWS. REVERSE COLUMNS FOR 50%] – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT

		Very Unacceptable	Somewhat Unacceptable	Neither acceptable nor unacceptable	Somewhat acceptable	Very Acceptable
1	Left their general domestic waste on the side of the road (not in a bin)	1	2	3	4	5
2	Left their general domestic waste in a park, bushland or national park	1	2	3	4	5
3	Left their green waste in a park, bushland or national park	1	2	3	4	5
4	Left their household goods (e.g. appliances, TVs, toys, furniture) in a park, bushland or national park	1	2	3	4	5
5	Left household goods (e.g. appliances, TVs, toys, furniture) on the side of the road	1	2	3	4	5
6	Left tyres, chemical drums and paint tins on the side of the road	1	2	3	4	5
7	Left tyres, chemical drums and paint tins in a park, bushland or national park	1	2	3	4	5
8	Left household goods beside a charity bin	1	2	3	4	5

**Q11.** Which of the following influence your decisions on how you dispose of bulky waste? {SINGLE PER ROW} SOCIAL 3. DUMPING

#### [RANDOMISE ROWS. REVERSE COLUMNS FOR 50%]

		A lot	A little	Not at all
1	Family	1	2	3
2	Friends	1	2	3
3	Neighbours	1	2	3
4	Work colleagues	1	2	3
5	Your local council (e.g. website or newsletters)	1	2	3
6	State Government (website)	1	2	3
7	Social media	1	2	3
8	TV/ Radio	1	2	3

**Q12.** How much of a negative impact do you think waste items left behind have on the overall environment? {SINGLE}

ABILITY/MOTIVATION 7. LITTERING

### [REVERSE ORDER FOR 50%] – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT

A very big impact	5
Quite a big impact	4
Somewhat of an impact	3
A small impact	2
No impact at all	1
Don't know/unsure [ANCHOR]	99

### **Q13.** Thinking about the impacts of waste items on the environment, to what extent are you concerned with the following issues?

{SINGLE PER ROW}

MOTIVATION 7. LITTERING

### [RANDOMISE ROWS. REVERSE COLUMNS FOR 50% – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT]

		Not at all concerned	Not very concerned	Somewhat concerned	Very concerned	Extremely concerned
1	Animals eating waste items or being strangled or entangled by waste items	1	2	3	4	5

2	Impact on your own health (e.g. by drinking water and/or needle stick injuries)	1	2	3	4	5
3	General environmental impact (i.e. ecosystems and wildlife habitat, etc)	1	2	3	4	5
4	Impact on your general enjoyment of the environment	1	2	3	4	5

# **Q14.** For items **smaller than a wheelie bin load**, please indicate how much you agree or disagree with each of the following statements.

{SINGLE PER ROW}

MOTIVATION 6/7. LITTERING

### [RANDOMISE ROWS. REVERSE COLUMNS FOR 50% – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT]

	[DON'T SHOW HEADING IN BRACKETS]	Strongl y disagre e	Somewh at disagree	Neither agree nor disagree	Somew hat agree	Strongly agree	Don't Know
1	[CAUGHT] I wouldn't consider leaving small waste items (e.g. drink bottles, cups, packaging) in a public place because I would be too worried about getting caught	1	2	3	4	5	99
2	[FINE] I wouldn't consider leaving small waste items (e.g. drink bottles, cups, packaging) in a public place because I would be worried about the size of the fine	1	2	3	4	5	99
3	[BIO] I would consider leaving food waste in a park, bushland or national park because it is biodegradable	1	2	3	4	5	99
4	[LOOK] I wouldn't consider leaving waste in a public place because it would look ugly	1	2	3	4	5	99
5	[COST] I wouldn't consider leaving waste in a public place because someone else would have to pick it up	1	2	3	4	5	99

# **Q15.** Now for items **larger than a wheelie bin load**, please indicate how much you agree or disagree with each of the following statements.

(SINGLE PER ROW)

MOTIVATION 6/7. DUMPING

[RANDOMISE ROWS. REVERSE COLUMNS FOR 50% – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT]

	[DON'T SHOW HEADING IN BRACKETS]	Strongl y disagre e	Somewh at disagree	Neither agree nor disagree	Somewh at agree	Strongly agree	Don't Know
1	[COST] It costs too much to take waste to the rubbish tip these days	1	2	3	4	5	99
2	[COST] I would consider leaving large volumes of waste (i.e. anything larger than a wheelie bin) in a public place because of the cost of taking it to the rubbish tip	1	2	3	4	5	99
3	[ENV IMP] I would consider leaving large volumes of waste (i.e. anything larger than a wheelie bin) in a public place if I knew that it wouldn't damage the environment	1	2	3	4	5	99
4	[CAUGHT] I wouldn't consider leaving large volumes of waste (i.e. anything larger than a wheelie bin) in a public place because I would be too worried about getting caught	1	2	3	4	5	99
5	[FINE] I wouldn't consider leaving large volumes of waste (i.e. anything larger than a wheelie bin) in a public place because I would be worried about the size of the fine	1	2	3	4	5	99
6	[LOOK] I wouldn't consider leaving waste in a public place because it would look ugly	1	2	3	4	5	99
7	[COST] I wouldn't consider leaving waste in a public place because someone else would have to pick it up	1	2	3	4	5	99

**Q16.** Thinking about small items, how likely do you think it is that you would be caught and fined in the following situations?

{SINGLE}

MOTIVATION 6/7. LITTERING

#### [RANDOMISE ROWS. REVERSE COLUMNS FOR 50%]

No	Very	Some	Fairly	Proba	Almos	Certai	Don't
chanc	slight	possib	good	ble	t sure	n,	know
e,	possib	ility	possib	(7 in	(9 in	practi	[ANC
almos	ility	(3 in	ility	10)	10)	cally	HOR]
t no		10)					

		chanc e (1 in 100)	(1 in 10)		(5 in 10)			certai n (99 in 100)	
1	Placed a bottle or can beside an overflowing bin	0	1	3	5	7	9	10	99
2	Left a bottle or can on the street	0	1	3	5	7	9	10	99
3	Dropped cigarette butts out of a moving vehicle	0	1	3	5	7	9	10	99
4	Dropped a small bag of rubbish out of a moving vehicle	0	1	3	5	7	9	10	99
5	Left food scraps in a park, bushland or national park	0	1	3	5	7	9	10	99
6	Releasing balloons as part of a celebration	0	1	3	5	7	9	10	99

**Q17.** Thinking about items larger than a wheelie bin, how likely do you think it is that you would be caught and fined if you were leaving waste in the following locations?

{SINGLE}

MOTIVATION 6/7. DUMPING

#### [RANDOMISE ROWS. REVERSE COLUMNS FOR 50%]

		No chanc e, almos t no chanc e (1 in 100)	1 Very slight possib ility (1 in 10)	Some possib ility (3 in 10)	Fairly good possib ility (5 in 10)	Proba ble (7 in 10)	Almos t sure (9 in 10)	Certai n, practi cally certai n (99 in 100)	Don't know [ANC HOR]
1	Left on the street near your home (not in a bin)	0	1	3	5	7	9	10	99
2	On the side of a highway or large road	0	1	3	5	7	9	10	99
3	In a local park	0	1	3	5	7	9	10	99
4	In a park, bushland or national park	0	1	3	5	7	9	10	99
5	Disposed of in a business' rubbish bin (not your own business)	0	1	3	5	7	9	10	99
6	Beside a Charity bin or outside a charity store	0	1	3	5	7	9	10	99
7	On a vacant block of land	0	1	3	5	7	9	10	99

#### **SECTION D: REPORTING**

[INSERT TIME STAMP FOR SECTION]

#### **DEFINITION**

The definition of littering and illegal dumping is the unlawful deposit of any type of waste material. **Littering** is when the material is less than 200 litres in volume (about the volume of a wheelie bin), and **illegal dumping** is when the material is more than 200 litres in volume.

**Q18.** How much of a problem do you consider litter to be in your local area? {SINGLE}

**MOTIVATION 4. LITTERING** 

### [REVERSE ORDER FOR 50% – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT]

Very serious	5
Fairly serious	4
Somewhat serious	3
Not very serious	2
Not at all serious	1
Don't know	99

# **Q19.** How much of a problem do you consider illegal dumping to be in your local area? {SINGLE}

MOTIVATION 4. DUMPING

# [REVERSE ORDER FOR 50% – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT]

Very serious	5
Fairly serious	4
Somewhat serious	3
Not very serious	2
Not at all serious	1
Don't know	99

# **Q20.** Who do you think is most responsible for addressing the issues of littering and illegal dumping? *Please* select up to three each for littering and illegal dumping.

{MULTIPLE PER COLUMN}

ABILITY 3. LITTERING & DUMPING

#### [RANDOMISE ROWS]

		Littering	Illegal Dumping
1	Myself	1	2

2	Neighbours	1	2
3	Community or school groups	1	2
4	Environmental groups and charities	1	2
5	Businesses	1	2
6	Land owners	1	2
7	Local councils	1	2
8	State government	1	2

**Q21.** Some methods of waste disposal are legal, and others are not legal. Please indicate whether you think the following are legal or illegal.

{SINGLE PER ROW}

ABILITY 3. LITTERING & DUMPING

#### [RANDOMISE ROWS.]

		Legal	Illegal	Don't know
1	Leaving green waste in a park, bushland or national park	1	2	99
2	Leaving furniture on the side of the road outside your home (outside of kerbside pickup times)	1	2	99
3	Putting general domestic waste in a wheelie bin for collection by the council	1	2	99
4	Dropping something out the window of a moving vehicle	1	2	99
5	Releasing balloons at a celebration or memorial	1	2	99
6	Leaving household goods (e.g. appliances, TVs, toys, furniture) outside a charity shop and/or next to a charity bin	1	2	99
7	Leaving goods (e.g. appliances, TVs, toys, furniture) outside of a landfill/ transfer station	1	2	99
8	Leaving household rubbish beside a public bin (if bin is full)	1	2	99

**Q22.** To which, if any, of the following organisations would you report littering and illegal dumping? {MULTIPLE PER COLUMN}
ABILITY 1. LITTERING & DUMPING

#### [RANDOMISE ROWS FOR 50%]

		Littering	Illegal Dumping
1	Your local council	1	2
2	State Government – Department of Environment and Science	1	2
3	Queensland Parks and Wildlife Service	1	2
4	Other State government department	1	2
5	My Local MP or councillor	1	2
6	Queensland Police Service	1	2

96	Other [SPECIFY] [ANCHOR]	1	2
99	I can't remember/Don't know [ANCHOR] [EXCLUSIVE]	1	2

### Q23. How likely would you be to report someone if you saw them doing the following?

{SINGLE PER ROW}

BEHAVIOUR 1. LITTER

# [RANDOMISE ROWS, REVERSE COLUMNS FOR 50% – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT]

		Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely
1	Throw a can, bottle or drink container from a car onto a road, footpath or gutter	1	2	3	4	5
2	Flick a cigarette butt onto the road, footpath or gutter	1	2	3	4	5
3	Flick a cigarette butt into dry grass or bushland	1	2	3	4	5
4	Throw an apple core into a park, bushland or national park	1	2	3	4	5
5	Releasing balloons as part of a celebration	1	2	3	4	5
6	Empty their car of waste onto a carpark or roadside	1	2	3	4	5
7	Leave rubbish behind on a public picnic table, chair or bench	1	2	3	4	5
8	Leave rubbish behind at an event, stadium or concert	1	2	3	4	5

# **Q24.** And now thinking about waste **larger than a wheelie bin load**, how likely would you be to report someone if you saw them doing the following?

{SINGLE PER ROW}

BEHAVIOUR 1. DUMPING

# [RANDOMISE ROWS, REVERSE COLUMNS FOR 50% – PLEASE MAKE SURE THE SCALES ARE IN THE SAME DIRECTION THROUGHOUT]

		Very unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Very likely
1	Leave their general domestic waste on the side of the road, carpark or footpath (not in a bin)	1	2	3	4	5
2	Leave their general domestic waste in a park, bushland or national park	1	2	3	4	5
3	Leave their green waste in a park, bushland or national park	1	2	3	4	5

4	Leave their household goods (e.g. appliances, TVs, toys, furniture) in a park, bushland or national park	1	2	3	4	5
5	Leave household goods (e.g. appliances, TVs, toys, furniture) on the side of the road, carpark or footpath	1	2	3	4	5
6	Leave tyres, chemical drums and paint tins on the side of the road, carpark or footpath	1	2	3	4	5
7	Leave tyres, chemical drums and paint tins in a park, bushland or national park	1	2	3	4	5
8	Leave household goods/clothes beside a charity bin	1	2	3	4	5

#### **Q25.** Have you ever reported a littering or illegal dumping act?

{SINGLE PER COLUMN}

BEHAVIOUR 1. LITTERING & DUMPING

		Littering	Illegal Dumping
1	Yes	1	2
2	No, but I have considered it	1	2
3	No	1	2
97	Prefer not to say	1	2

# **Q26.** What are the main reasons, if any, that you would not report a littering or illegal dumping act? *Please select up to three each for littering and illegal dumping.*

{MULTIPLE PER COLUMN}

MOTIVATION. 1. LITTERING & DUMPING

	[RANDOMISE COLUMNS, RANDOMISE ROWS. ANCHOR 99.]	Littering	Illegal Dumping
1	The reporting process is inconvenient and/or difficult (please specify why it is inconvenient) [SPECIFY]	1	2
2	I don't see it as a problem	1	2
3	It's not my responsibility	1	2
4	I didn't know I could report it/ or how to report it	1	2
5	I was unable to take down the required details at the time of the incident	1	2
6	I don't want to go to court	1	2
7	I wouldn't want to get the offender in trouble/ fined	1	2
8	I don't think it is right to report on others	1	2

9	I am worried that the offender would find out I reported	1	2
10	Waste of time, I don't think that anything would be done with my report	1	2
96	Other [SPECIFY] [ANCHOR]	1	2

**Q27.** How much do think the minimum on-the-spot-fine, if any, would be for disposing of the following types of waste in a public place?

{SINGLE PER ROW}

ABILITY 7. LITTER & DUMPING

#### [RANDOMISE ROWS. REVERSE COLUMNS FOR 50%]

		No fine	\$1- \$200	\$201- \$500	\$501- \$1,000	\$1,001 - \$5,000	\$5,001 - \$10,00 0	Don't know [ANC HOR]
1	Littering such as a Cigarette butt or drink container	1	2	3	4	5	6	99
2	Dangerous littering such as a Syringe	1	2	3	4	5	6	99
3	Small scale illegal dumping such as Single mattress or washing machine	1	2	3	4	5	6	99
4	Large scale dumping such as a dump truck load of construction waste.	1	2	3	4	5	6	99

#### Q28. Have a look over the minimum fines for an individual described below. Do you think these are ...?

		Too High	Appropriate	Too Low	Unsure
1	Littering: \$266	1	2	3	99
2	Dangerous littering: \$533	1	2	3	99
3	Small scale dumping: \$2135	1	2	3	99
4	Large scale dumping: \$2669	1	2	3	99

**Q29.** Before starting this survey which of the following were you aware of?

{MULTIPLE}

ABILITY 1.

#### [RANDOMISE ROWS]

1 It is possible to report incidences of littering from a vehicle

2	The State Environment Department and Local Council can issue fines for littering and illegal dumping
3	It is possible to report illegally dumped waste without vehicle details
99	I was not aware of any of these [ANCHOR EXCLUSIVE]

**Q30.** How often do you pick up litter that you see? (e.g. drink containers, soft plastic, etc). {SINGLE}

BEHAVIOUR 4.

#### [REVERSE ROWS FOR 50%]

Less than once a year or never	1
Once in the last year	2
Once in the last 3 months	3
Once in the last month	4
Within the last week	5

**Q31.** Have you ever participated as a volunteer in a waste clean-up event (e.g. Clean up Australia day)? {SINGLE}

BEHAVIOUR 4.

#### [REVERSE ROWS FOR 50%]

Yes, more than 5 years ago	1
Yes, in the past 5 years	2
No	3
Unsure	99

**Q32.** Can you recall any littering or illegal dumping campaigns run state-wide or in your local community? {OPEN ENDED}

**ABILITY 5. LITTERING** 

<TICK BOX (CODE 99) FOR "I DON'T HAVE ANY RESPONSE FOR THIS">

[OPEN ENDED TEXT RESPONSE]

#### **SECTION E: DEMOGRAPHICS**

Just to finish off, the last few questions are about yourself to help with analysis purposes only. The findings will be combined with everyone else taking part in the survey.

<ASK ALL>

**Q33.** Do you and/or any other members of your household hold a current driver's licence? *Please select any that apply.* 

{MULTIPLE} ABILITY 3.

Yes, I hold a drivers licence	1
Yes, someone else in my household holds a drivers licence	2
No [EXCLUSIVE CODE]	0

#### **Q34.** Does anyone in your household own or have access to:

{SINGLE PER ROW} PHYSICAL 3.

#### [RANDOMISE ROWS]

		Yes	No
1	A car or other motor vehicle (excluding motorcycles or scooters)	1	0
2	A trailer that can transport waste	1	0

### **Q35.** Which of the following best describes your household situation? Please select one only $\{SINGLE\}$

#Household#

Living alone	1
Living with parents	2
Living with other adults (e.g. friends, flatmates, other relative)	3
Living with partner/ fiancé /spouse, with no children at home	4
Living with partner/ fiancé /spouse, with children at home	5
Single parent with children at home	6
Something else [SPECIFY] [ANCHOR]	96
I'd prefer not to say [ANCHOR]	97

# $\begin{tabular}{ll} \bf Q36. & Which of the following best describes your living situation? & \textit{Please select one only} \\ \{ SINGLE \} & \end{tabular}$

#Tenure#

Rent	1
Own / mortgage your home	3
Live with parents or guardian	4
Live in a communal boarding situation e.g. hall of residence or hostel	5
Other [SPECIFY]	96
Prefer not to say	97

#### Q37. How would you best describe the type of dwelling you live in?

{SINGLE}

#Dwelling#

Detached house	1	

Townhouse / Semi-detached house	2
Unit / Apartment	3
Other [SPECIFY]	96

# **Q38.** What is the highest level of education that you have completed so far? *Please select one only* {SINGLE RESPONSE}

#Education#

Did not go to school	1
Year 8 or below	2
Year 9-11	3
Year 12 or equivalent	4
Certificate (I/IV) or Trade qualification	5
Advanced Diploma or Diploma	6
Bachelor degree	7
Postgraduate degree	8
I'd prefer not to say/Don't Know [ANCHOR]	97

# **Q39.** Which of the following best describes your employment status? Please select one only $\{SINGLE\}$

#Employment#

Employed full time	1
Employed part time	2
Retired, pensioner or unable to work	3
Home duties	4
Student	5
Looking for work	6
Other / prefer not to say	97

# **Q40.** What is your approximate annual household income before tax? That is, the combined income of all members of your household.

{SINGLE RESPONSE}

#Income#

Up to \$40,000	1
Between \$40,001 to \$80,000	2
Between \$80,001 to \$120,000	3
Between \$120,000 to \$200,000	4
More than \$200,000	5
I'd prefer not to say/Don't know [ANCHOR]	97

**Q41.** Do you usually speak a language other than English at home? *Please select one.* 

{SINGLE RESPONSE}

#LOTE#

No (only speak English)	0
Yes	1
I'd prefer not to say	97

#### <ASK IF PREVIOUS QUESTION=1>

**Q42.** What language(s), other than English, do you usually speak at home? *Please select all that apply.* {MULTIPLE RESPONSE}

#Languages#

Arabic (includes Lebanese)	01
Australian Indigenous Language	02
Chinese (Mandarin)	03
Chinese (Cantonese)	04
Croatian	05
French	06
German	07
Greek	08
Hindi	09
Hungarian	10
Indonesian	11
Italian	12
Japanese	13
Khmer	14
Macedonian	15
Maltese	16
Persian	17
Polish	18
Portuguese	19
Russian	20
Spanish	21
Tagalog (Filipino)	22
Turkish	23
Vietnamese	24
Other [SPECIFY] [ANCHOR]	96
I'd prefer not to say [EXCLUSIVE] [ANCHOR]	97